

# Mobile TV Challenges

**Mobile Broadband Americas**  
**October 18, 2006**

**Steve Granek**

Vice President

IP Services - Business Development

NeuStar, Inc.

[steve.granek@neustar.biz](mailto:steve.granek@neustar.biz)

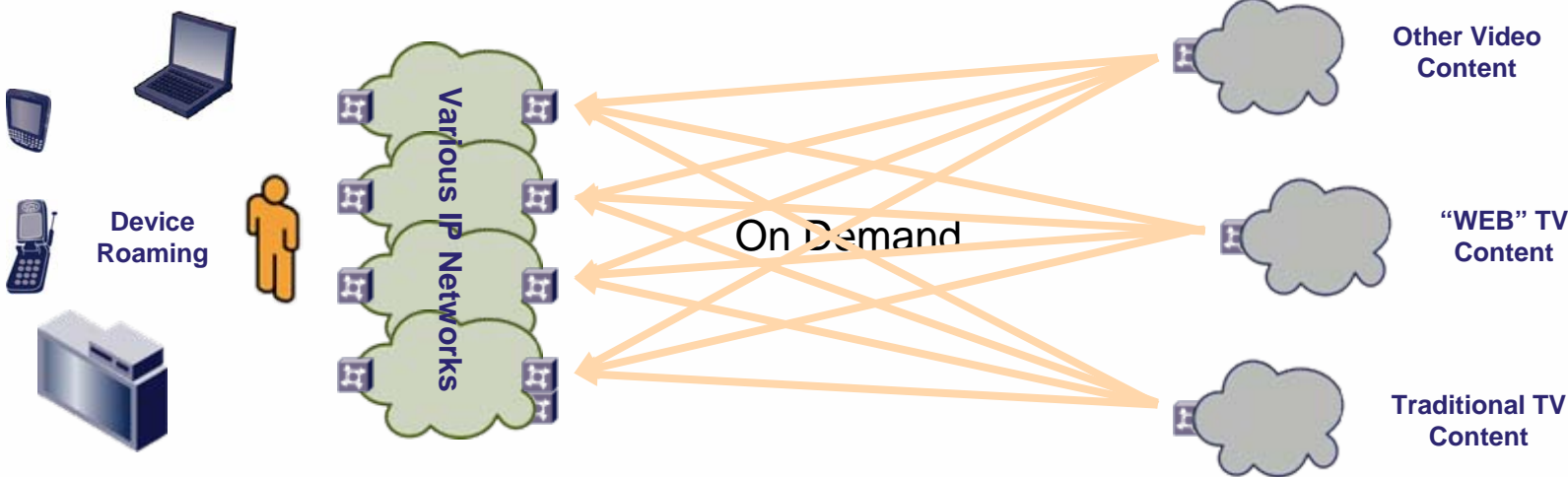
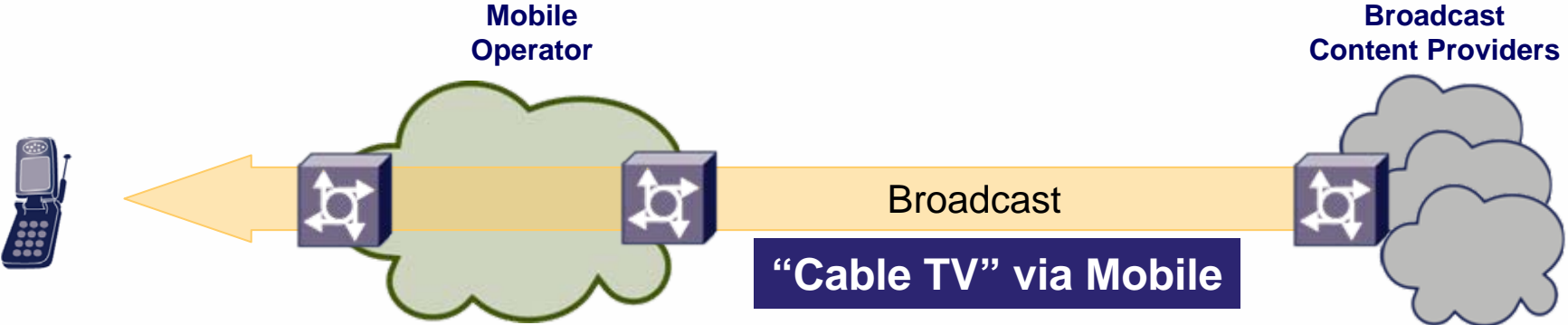
+1 571-434-5481



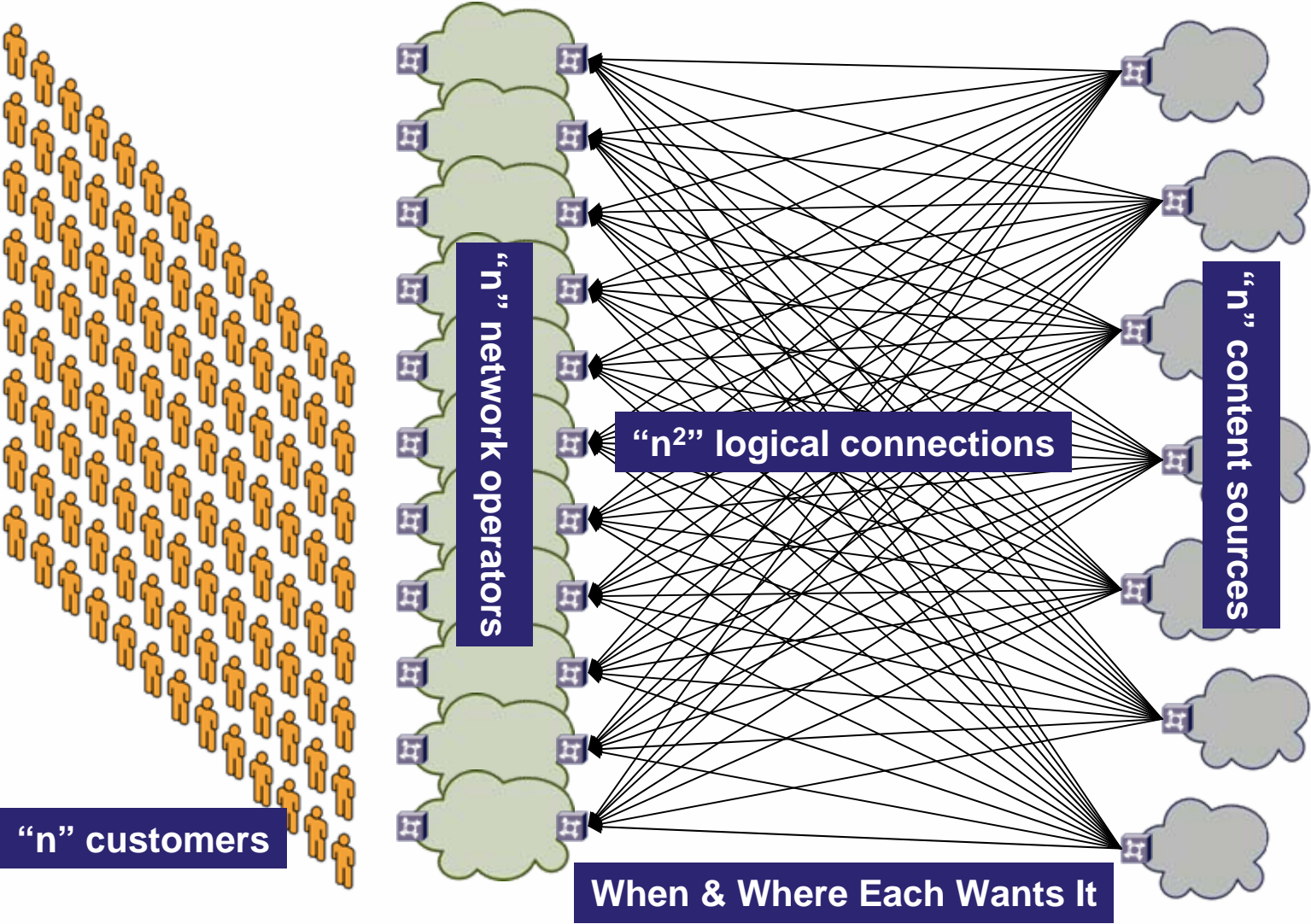
*Every day, billions of calls and hundreds of millions of internet transactions rely on NeuStar*

- **Neutral operator of shared, mission-critical directory services for telecom industry**
  - GSMA Root
  - WMRS (Wireless Message Routing Service)
  - NPAC (Number Portability) for North America
  - Global DNS name server infrastructure
- **Financially stable with proven track record**
  - 2005 revenue of US\$242M, earnings of US\$55M
  - Began as independent unit within Lockheed-Martin
  - Became NeuStar upon spin-out in 1999
- **Focus on value-creation for service providers**
  - Leadership role in SIP and ENUM industry groups
  - Leadership in identity management industry groups
  - Enable new revenue-generating services

# Mobile TV evolution



# Actually – That’s a Simplistic View



- **Operators now dealing with peers for content**
  - No longer “Bob’s Ringtone, Inc.”
  - Viacom, Disney, CNN
  - Fixed Mobile – between peers
- **HSD brings “open devices” to US with inertia of Steve’s expectation of use**
  - My laptop had better let me do what it does on my fixed internet or I’ll go elsewhere
  - Less will feel like interference
- **Assertion: Single Operator will not OWN the customer – sorry**
  - Customer “ownership” can no longer come from “control”
  - Think Nordstrom – not exact, but good way to think of it – a needed brain transplant for industry
- **Instead, cooperative “détente” among competitors – “coopetition”**
  - Current models hope for a different outcome
  - Thus, lip service is paid to the interop infrastructures needed to enable this
  - 3GPP, etc. focuses almost exclusively on intra-operator view – this is flawed
  - Without interop – IMS, Mobile TV, etc. - will fail to meet ROI expectation

This looks like “roaming”, routing and discovery on steroids

## I want to find out something about Steve

I might have his phone number, or a SIP URI, or e-mail address, or ?...



## For a communication session (classic) - The “attribute of identity” I need is:

Who is the authority for info on how to reach Steve via MMS? How about for SIP/Voice?

## But now, with content (like Mobile TV) - The “attribute of identity” I need is:

What capabilities does my device have right now?

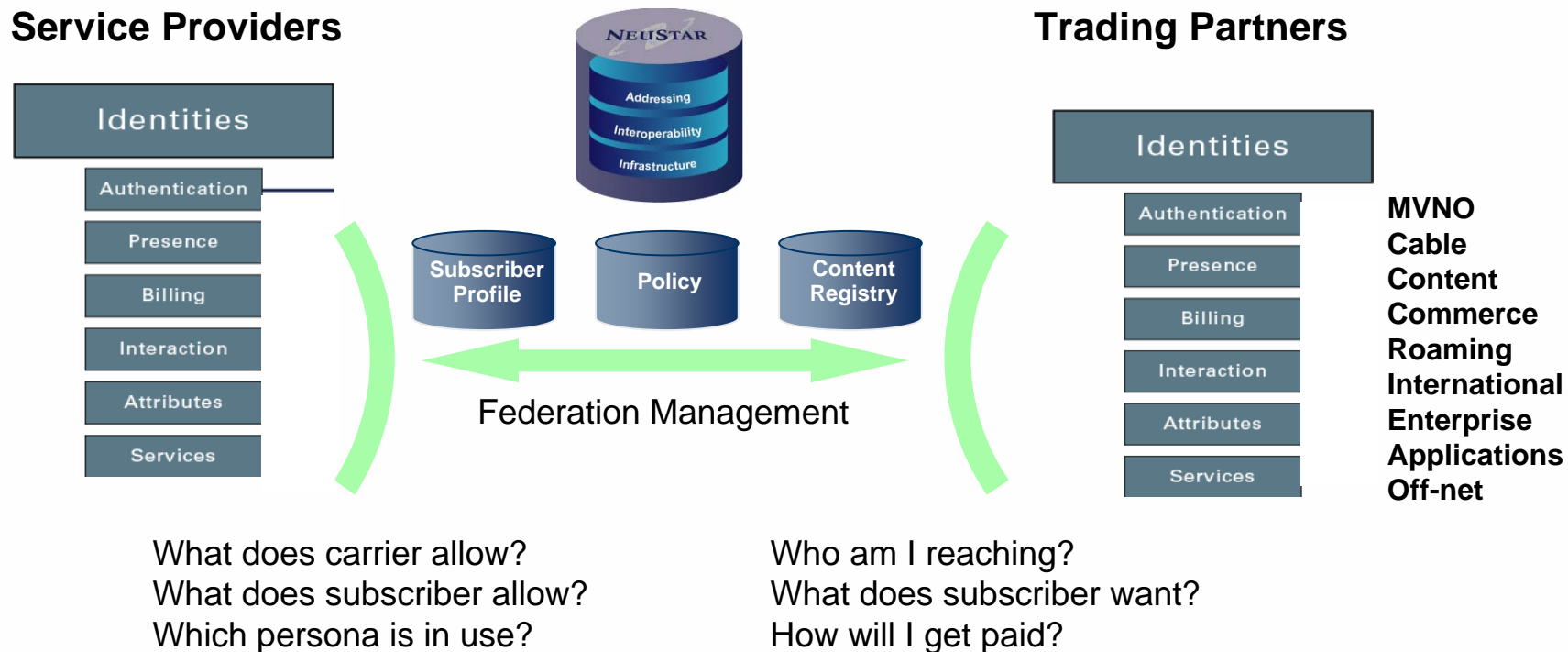
Who do I get age verification (legal/regulatory) re: Steve’s age (adult content)?

Now that I know WHERE he is NOW, what kind of DRM does his current device have?

Who can authorize this payment if this is “on demand”

What kind of programming does Steve prefer?

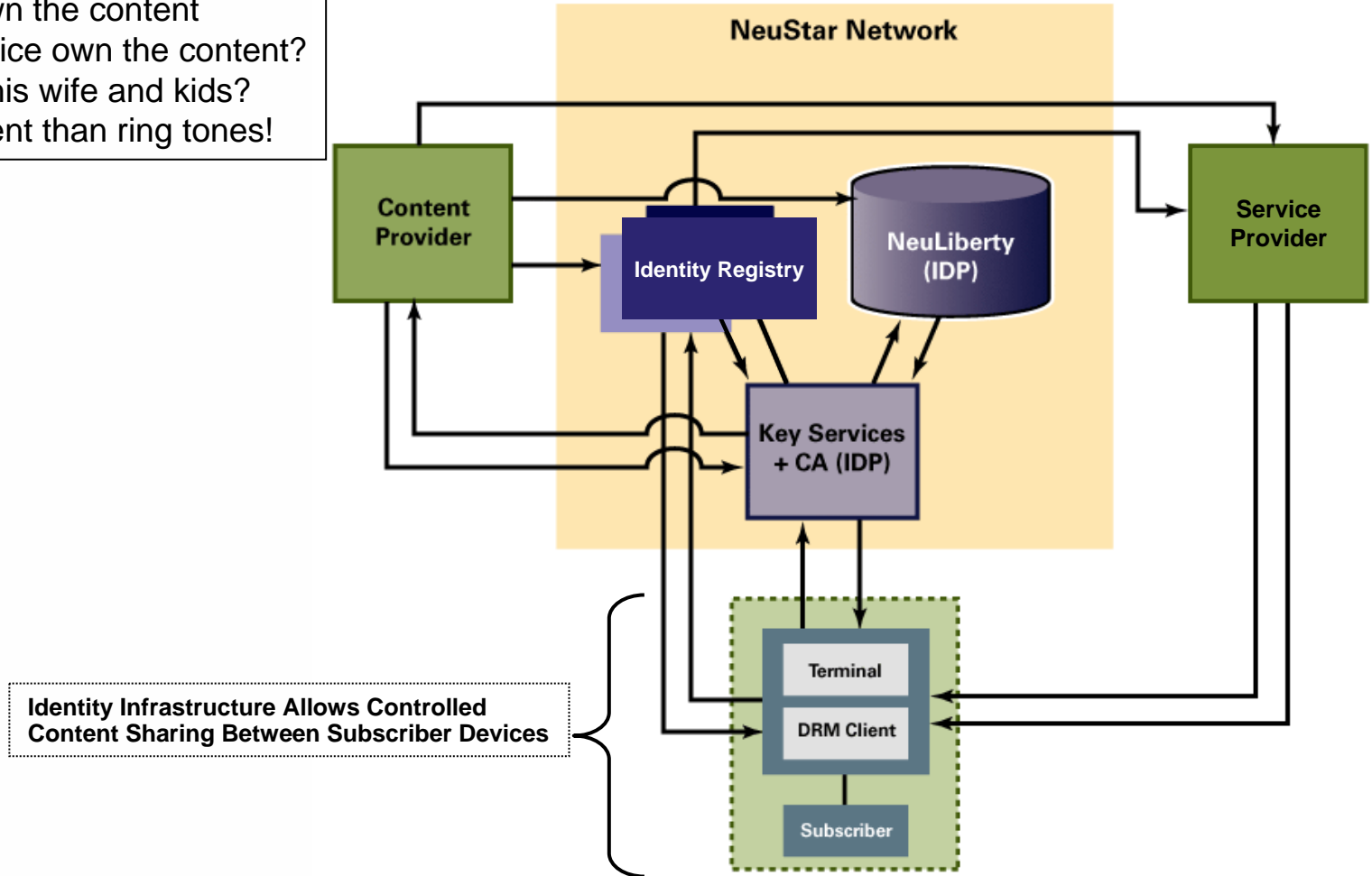
# Registries - Key Building Block to Scalable Interop



**Discovery via Neutral Registry Enables Inter-op**

# Example: Enabling ADHOC DRM using Identity

- Does Bob own the content
- Does his device own the content?
- What about his wife and kids?
- This is different than ring tones!



Identity allows a subscriber to have a "family" of devices and capabilities

- **Mobile TV will fail as a silo**
- **It's not even about "Mobile TV" – it's about digital media**
- **It's not about one operator – it's about shared customer ownership**
- **This is a "many to many to many" environment**
  - Most efforts are bilaterally focused
  - This does not scale, but are "science experiment/proof of concept"
- **Services will be created in real time – not statically provisioned**
- **Registries – shared and independent – are required**