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Network Reliability and Interoperability Council *VII*

NRIC Council Meeting

Focus Group 4

Broadband

Mary Retka, Chair

Reference Model Architectures for the Deployment of Residential Internet Access Service

December 6, 2004

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Focus Group 4 Charter

"The Council shall present recommendations to increase the deployment of high-speed residential Internet access service. The Council shall include Best Practices and service features that are, and will be, technology-neutral. The Council's recommendations shall be prepared in such a way as: (1) to ensure service compatibility; (2) to facilitate application innovation; and (3) to improve the security, reliability and interoperability of both residential user systems and service provider systems."

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Focus Group 4 Participants

- Albert Young, Cox
- Art Reilly, Cisco
- Brett Kilbourne, UTC
- Charlie Cerino, Comcast
- Dave McDysan, MCI
- Dave Wangrow, Motorola
- Dave Waring, Telcordia
- David Young, Verizon
- Doug Cooper, Catena/Cienna
- Jeff Hubbard, Qwest
- Jim Johnson, Bell South
- Jim Katzman, AOL
- Jim Runyon, Lucent
- John Colombo, Verizon
- John Chapa, SBC
- John Kenyon, Hughes Network Systems
- Kenny Kopta, Sprint
- Kevin Kearns, APCO
- Leo Palumbo, AT&T
- Lori Messing McGarry, CTIA
- Mark Behee, Motorola
- Mary Retka, Qwest
- Mike Petry, MCI
- Pete Youngberg, Sprint
- Randy Sharpe, Alcatel
- Tolga Ors, Intelsat
- Tom Soroka, USTA
- Victor Devito, AT&T
- Carl Postuma, Lucent
- Tim Walden, CenturyTel
- Jim Mollenkopf, Current Technologies
- Doug McMurray, IDACOMM
- Brian White, CenturyTel
- Roger DeVille, CenturyTel
- Fouad Brahim Boumakh, Digital Wireless

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Scope

- NRIC VII Focus Group 4 will identify and develop reference model architectures illustrating all current generally available alternatives to provision high speed residential Internet access service.
- These reference models will be the most commonly known methods for high-speed residential Internet Access deployment.
- The reference models, reflecting today's existing environment, are to be segmented by the type of infrastructure deployed
- These reference models will depict only those components of the architecture required to provide high-speed residential Internet access service.
- While some of the reference models may be geographically bounded, others will not be geographically bounded.

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Methodology

- Reviewed the work of the NRIC VI FG on Broadband and agreed to use it as a baseline and move forward from there with our new charter.
- Developed the definition of Residential Internet Access
- Developed the Master Reference Model and defined the demarcation points for this effort to be on the network side of the connection to the customer and at the connection point to the Internet
- Subgroups developed models of the architectures.

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Residential Internet Access

- The term Residential Internet Access encompasses the many different commercially available ways for Residential Consumers to access the Internet.
- The use of this term in the context of this deliverable is not application specific.
- Residential Internet Access is considered to be a pathway from the subscriber to the public Internet.
- Broadband technology should be viewed in terms of having sufficient bandwidth to provide satisfactory performance while accommodating a wider range of customers, applications and technological requirements.
- It is viewed to be always-available access technology so long as the user's Internet device is turned on, and requires no additional user activity to function.
- It has sufficient bandwidth to support multiple applications simultaneously.
- The area of concentration for this focus group is to offer recommendations to further advance the domestic use of broadband technology for Residential Internet Access.

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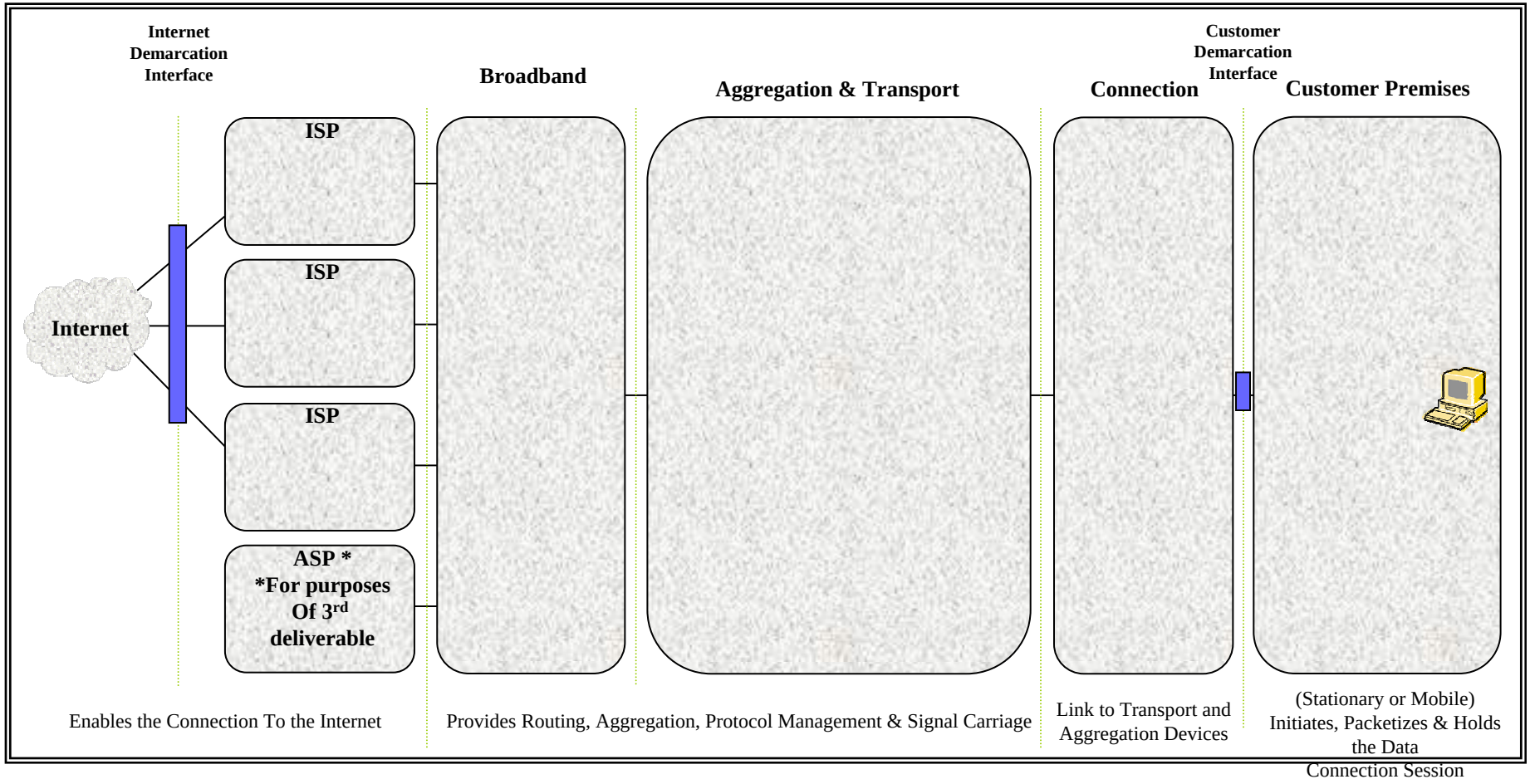
Master Reference Model



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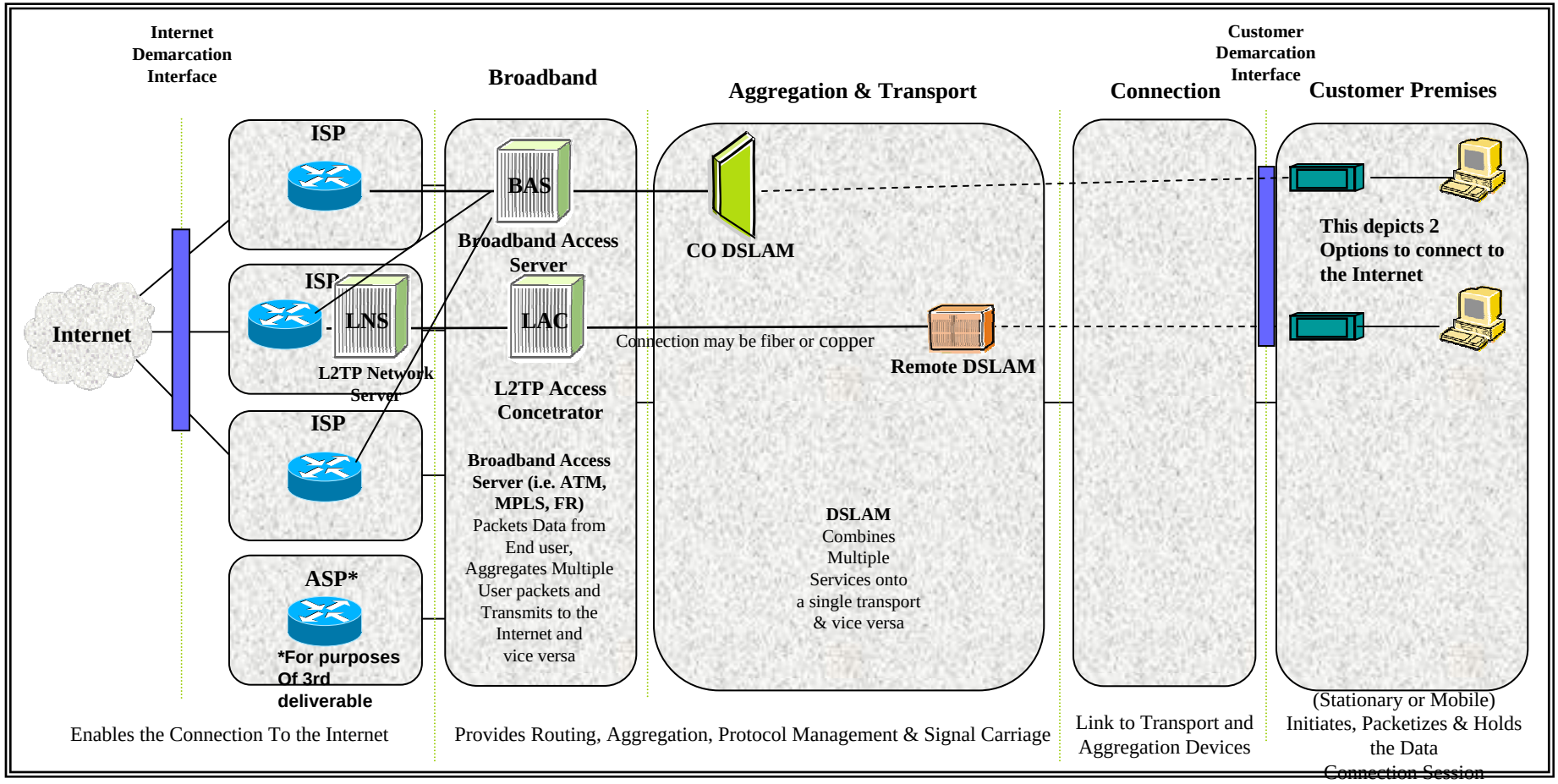
Sample Reference Model DSL



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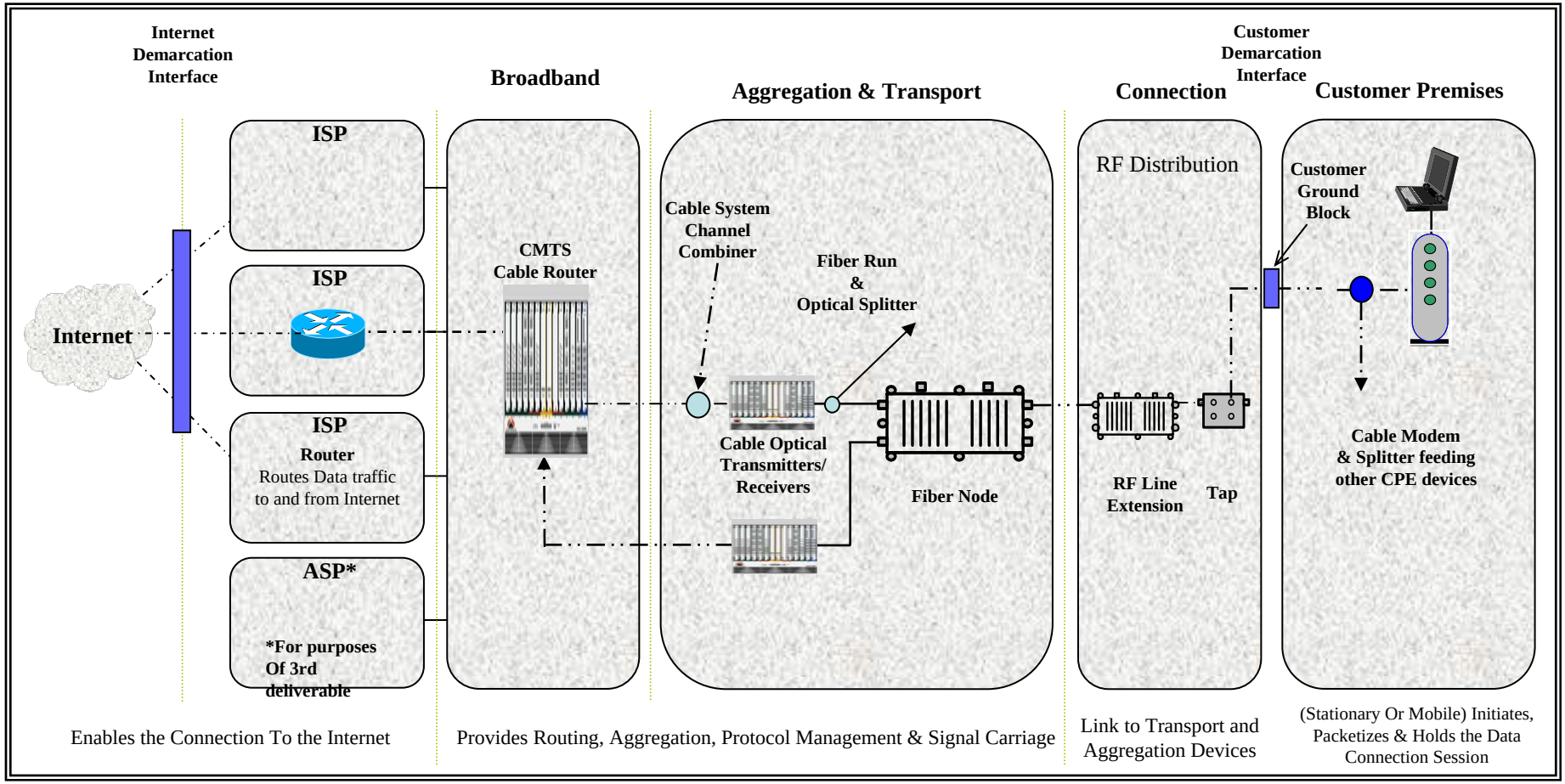
Sample Reference Model Cable



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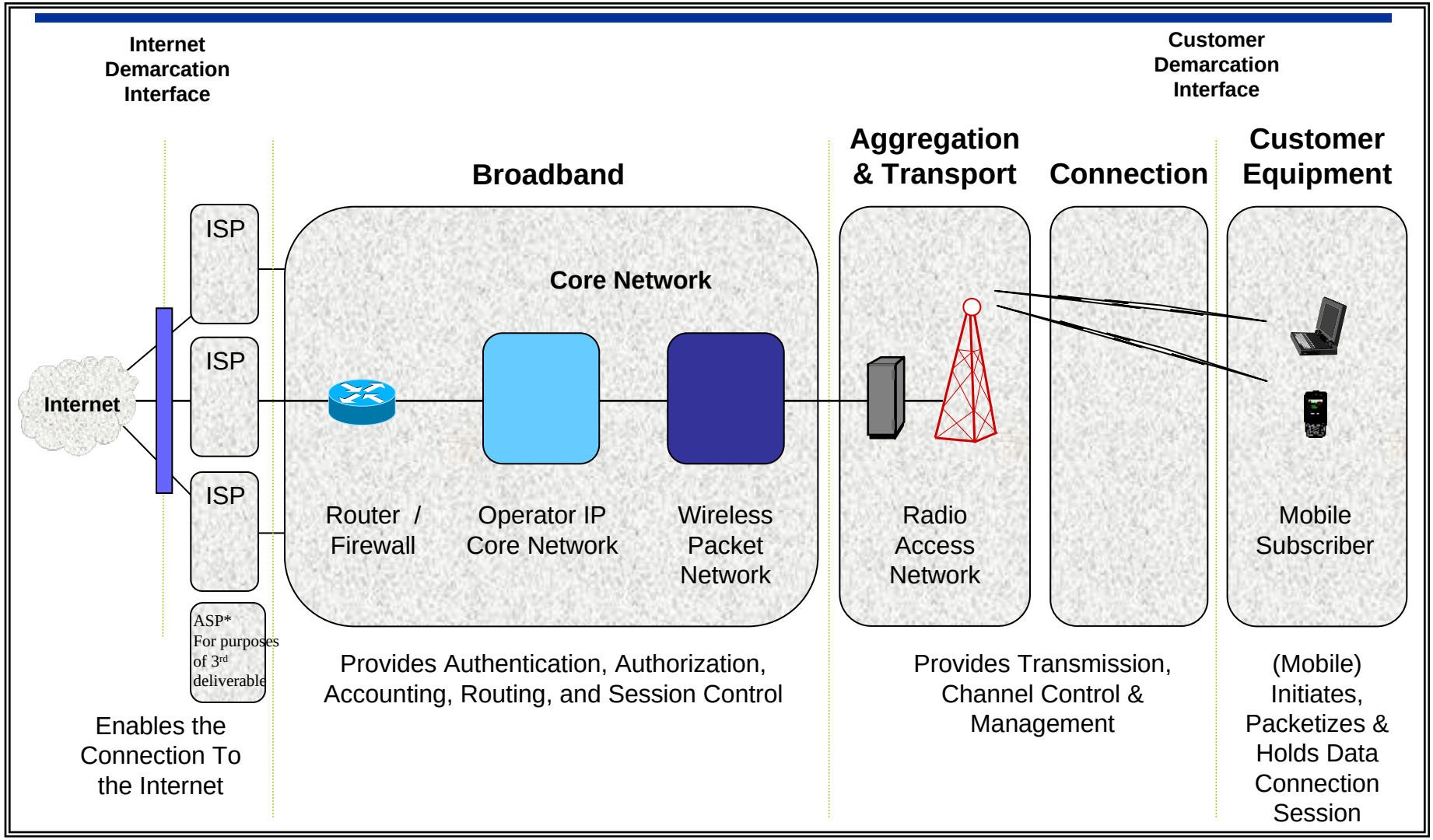
Sample Reference Model
Mobile Wireless Data



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Next Steps

- *Based on these models, the Focus Group has already begun the next effort to identify Best Practices that facilitate the deployment of a high speed residential Internet access service architecture. The deliverable is due on June 24, 2005*
- *A sub group has determined the status of our existing broadband Best Practices. We have begun to set the path for the development of our new Best Practices.*