**Draft Charge to Advanced Layer 3 Services Community Planning Team**

**Background**

*TR-CPS Review Committee*

During the spring of 2013, the Network Architecture, Operations and Policy Program Advisory Group (NAOPpag) convened a TR-CPS Review Committee[[1]](#footnote-1). When the TransitRail and Commercial Peering Services were combined, there was a call for a review of the service at regular intervals. The TR-CPS Review Committee reviewed the current service, analyzed trends in peering and considered the future of the current service. The committee made a recommendation to NAOPpag that a Future Peering Service Framework Committee be convened.

*Future Peering Service Framework Committee*

The Future Peering Service Framework Committee[[2]](#footnote-2) was convened during the fall of 2013. The group was charged to “consider, define and articulate the strategic value of a future peering service, its target service capabilities (and types of peering targets), measurements of its success, a plan for its future evaluation and an architecture, revenue and cost profile for the service. A manageable operational model, either inside Internet2 or through a partner must also be considered, but with a holistic view of how integration or separation affects total cost and planning to the community. The discussion should center on the value that Internet2 and its regional partners can deliver to the Internet2 member institutions and other entities’ services by the regional networks. Potential collaboration with global partners to extend the reach of the service and further spread cost and add value is also a consideration.”

The Future Peering Service Framework Committee delivered their final report to the NAOPpag in March of 2014. The Committee recommended that the NAOPpag convene community team to work with Internet2 staff in developing the next evolution of the Internet2 peering service.

**Proposed Charge for the Layer 3 Services Community Planning Team**

The NAOPpag requests that Internet2 staff convene three groups to work on peering:

1. A community group referred to as the Layer 3 Services Community Planning Team to provide input and direction on the community’s peering service beginning on July 1, 2014
2. A community group, the Peering Planning Group, that has an extensive understanding of peering and can provide ongoing input on long-range planning, goal setting and community communications between community stakeholders and operators of the peering service to the Internet2 staff as staff run the peering service
3. A community group that acts as a sounding board, as needed, to assist with the confidential negotiations with potential peers

This charge will focus on the work of the Layer 3 Services Community Planning Team. The Layer 3 Services Community Planning Team should be established to provide input on updating Internet2’s Advanced Layer 3 Service Architecture and policies, including both R&E IP and a peering service. The group will provide input and direction to Internet2 staff as they plan the next evolution of the peering service and will work to continue enhancements to the peering service. Taking into consideration the near-term and longer-term recommendations made by the Future Peering Service Framework Committee, while accommodating the need for input to the operation of the peering service, the following goals are set for the Layer 3 Services Community Planning Team:

6-month goals

* Provide input on the implementation of the Future Peering Committee’s recommendation to combine the current R&E & TR-CPS infrastructure into a single virtualized physical network that leverages the existing 100 Gbps infrastructure and creates a production quality solution to implement both R&E and peering services.
* Articulate a new routing, virtualization and management strategy to provide research, education, NET+ and commercial peering across the R&E and peering services. A goal will be to articulate which default Autonomous System Numbers are used for which purposes.
* Update the Internet2 Headroom Practice to become a broader R&E Community Headroom Practice – a more coherent approach to capacity and service levels that also balances costs and allows leaders in the community to make informed decisions about capacity planning and investment trade offs.
* Increase flexibility for connectors by offering dedicated ports for peering services as well as the more traditional converged services currently offered.
* Internet2 will immediately establish a confidential steering group, an operating peering coordination group, that will include:
  + Up of two or three peering practitioners from the community who would serve as a “sounding board” for the Lead Peering Coordinator.

The Peering Planning Group will provide input to staff on the following 6-36 month goals.

6-36 Month Goals

* Future network requirements should be more data driven than casual estimates.
* Direct connections to the peering service should continue to be offered.
* Headroom practice should be revisited so that the contradictory requirements of providing service guarantees for peering (and perhaps other) traffic, and preserving sufficient headroom for bursting of research applications, can be comfortably met.
* Participation in a global collaborative around peering is strategic for the U.S. R&E community and is encouraged.
* At least once every two years, a high-level review of both IP and peering services should be conducted and published.

**Layer 3 Services Community Planning Team Members**

The members of the Layer 3 Services Community Planning Team will include one or more members of the Future Peering Service Framework Committee and up to nine other community representatives.

**Timeline**

The group will be convened in April of 2014 to immediately begin this community planning work.

1. The TR-CPS Review Committee included Pankaj Shah (Chair), Pat Christian, Joe Freddoso, Dave Jent, Charlie McMahon and Marc Wallman. [↑](#footnote-ref-1)
2. The Future Peering Service Framework Committee included: Pat Christian (Co-Chair), Cas D’Angelo (Co-Chair), Jeff Bartig, Dan Jordt, John Moore, Jorgen Qvist, Dave Reese, Paul Schopis and Michael Sinatra. [↑](#footnote-ref-2)