# Re-Chartering BMWG

#### We have a solid General Charter

- But read it over,
- is there anything we can tweak this time?
- This is version 4 or 5, charters have become more detailed over time
- Then, we have our bullet item topics...

### Traffic Management

- Develop the methods to characterize the capacity of traffic management features in network devices, such as classification, policing, shaping, and active queue management. Existing terminology will be used where appropriate. Configured operation will be verified as a part of the methodology.
- The goal is a methodology to assess the maximum forwarding performance that a network device can sustain without dropping or impairing packets, or compromising the accuracy of multiple instances of traffic management functions. This is the benchmark for comparison between devices. Another goal is to devise methods that utilize flows with congestion-aware transport as part of the traffic load and still produce repeatable results in the isolated test environment.

#### **IPv6** Neighbor Discovery

 Large address space in IPv6 subnets presents several networking challenges, as described in RFC 6583. Indexes to describe the performance of network devices, such as the number of reachable devices on a subnetwork, are useful benchmarks to the operations community. The working group will develop the necessary terminology and methodologies to measure such benchmarks.

#### In-Service Software Upgrade

 Develop new methods and benchmarks to characterize the upgrade of network devices while in-service, considering both data and control plane operations and impacts. These devices are generally expected to maintain control plane session integrity, including routing connections. Quantification of Upgrade impact will include packet loss measurement, and other forms of recovery behavior will be noted accordingly. The work will produce a definition of ISSU, which will help refine the scope. Liaisons will be established as needed.

## Combine DC and VNF/Infrastruc?

 Benchmarking Methodologies have reliably characterized many physical devices. This work item extends and enhances the methods to virtual network functions and their unique supporting infrastructure. First, the new task space will be considered to ensure that common issues are considered from the start. Virtual routers, switches and platform capacity and performance characteristics will follow, including functions specific to datacenters.