

# Modelling Questions

- 1. What level of dependence do/should models have on Framework?**
- 2. What layers of models do we need, device, network, service, inventory, topology?**
- 3. How much granularity in power control? (e.g., power states vs on/off)**
- 4. Should control relate to intent or actual power usage?**
- 5. How generic should the model be for components? (e.g., linecards vs optics, vs forwarding planes)**
- 6. How to model power reported for other devices?**
- 7. How does the data get aggregated together?**
- 8. Accuracy of the data?**
- 9. Time intervals for data reporting?**

# **Q1. What level of dependence do/should models have on Framework?**

**Does the framework affect the structure of the models?**

**Or is it beneficial for the models to be aligned to the framework?**

**Or does it not matter (e.g., commonality in groupings)?**

## **Q2. What layer/relationship between the models do we need?**

**Device/Component & Network level models are obvious**

**What about topology/inventory (or are these just network models)**

**What about reporting the data to customers or end users (or is that outside YANG)**

### **Q3. How much granularity in power control?**

**Should this be generic states (e.g. reusing EMAN work), or a range (e.g., 1-100)?**

**Or should this be very simple (e.g., a simple boolean on/off)?**

**Or should this vary by the component being modelled?**

**How does a client know what states a device/component supports and what they actually mean?**

**Does the configuration align with the operational state or are they different?**

## **Q4. Should control relate to intent or control actual power usage?**

**I.e., does the configuration put the device/component into low power sleep mode, or hybrid sleep or cold sleep?**

**Or does the configuration put the device/component into sleep capable mode, leaving it to the device to decide what state it should be in?**

**Or do we need to be able to model both?**

**Related: Do you set the forwarding ASIC to act in a particular way or tell it to optimize for performance or to minimize power usage.**

## **Q5. How generic should the model be for components?**

**Does it treat each component generically, with a generic power mode, or is it more concrete (e.g., different modellings properties for interfaces vs optics vs fabric vs forwarding planes, etc)?**

- **What does it mean to put a linecard into 70 out of 100? How would vendors implement consistently?**

**Could using identities and augmentations can be cover both? I.e., both generic identities with more concrete refinements?**

## **Q6. How to model reporting power for other devices?**

**Whilst not introducing any additional complexity in the main case where a device is reporting its power usage.**

**Does this differ at the device vs network level.**

**How to attribute power and avoid double counting.**

## **Q7. How/where does the data get aggregated?**

**Does any aggregation happen on the devices, or only at the network level?**

**Does power get reported both in aggregate and also in a fine-grained way?**

**How to avoid double accounting?**

## **Q8. How to control or report accuracy of the information?**

**It the granularity/accuracy statically defined in the data model? Or does a device need to report what accuracy it is able to report at?**

## **Q9. What time intervals is the data being reported over?**

**It is aggregated power over time, or instantaneous power usage (or both).**

**Can each component use its own time interval, or is this pre-defined and fixed? Or are there a standard set of time intervals that the data can be reported at?**

# Modelling Questions (Repeat)

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Thank you for your contributions and participating