

# RNP updates SAACC Virtual Meeting

May 18th, 2018

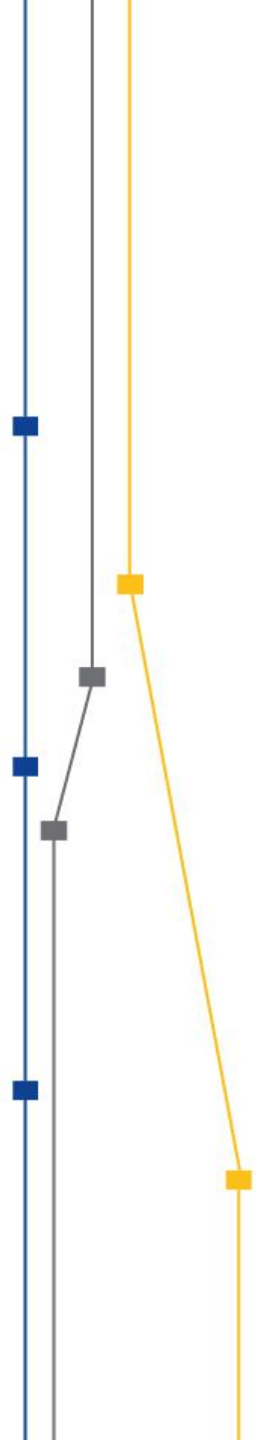
Aluizio Hazin



## RNP scalable infrastructure starting with $\geq 100$ G

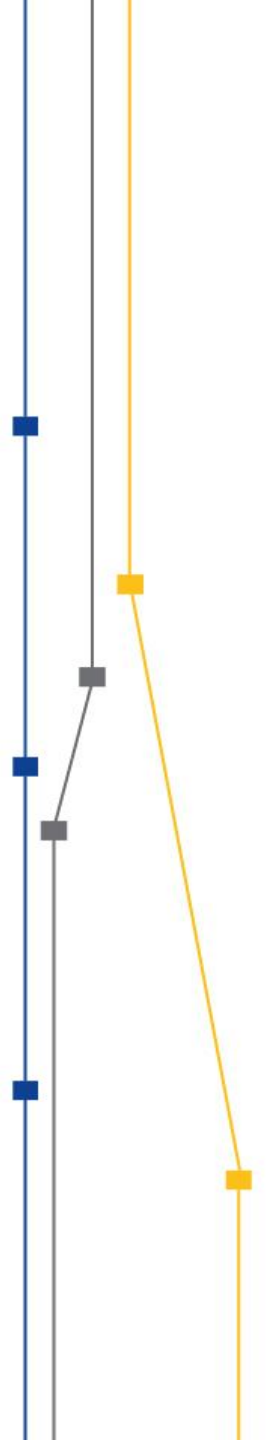
- Acquire Right of Use (IRU) of entire or fractional optical spectrum: 1,  $\frac{1}{2}$ ,  $\frac{1}{4}$ , ...
- Currently illuminating at 100G: initial  $N \times 100$  G.
- Provision of additional lambdas on demand
- Over time, can light up more channels or change the transponder (100 G  $\rightarrow$  400 G  $\rightarrow$  1 T  $\rightarrow$  ....)

... keeping pace with demand and technological evolution over the lifetime of the fiber!



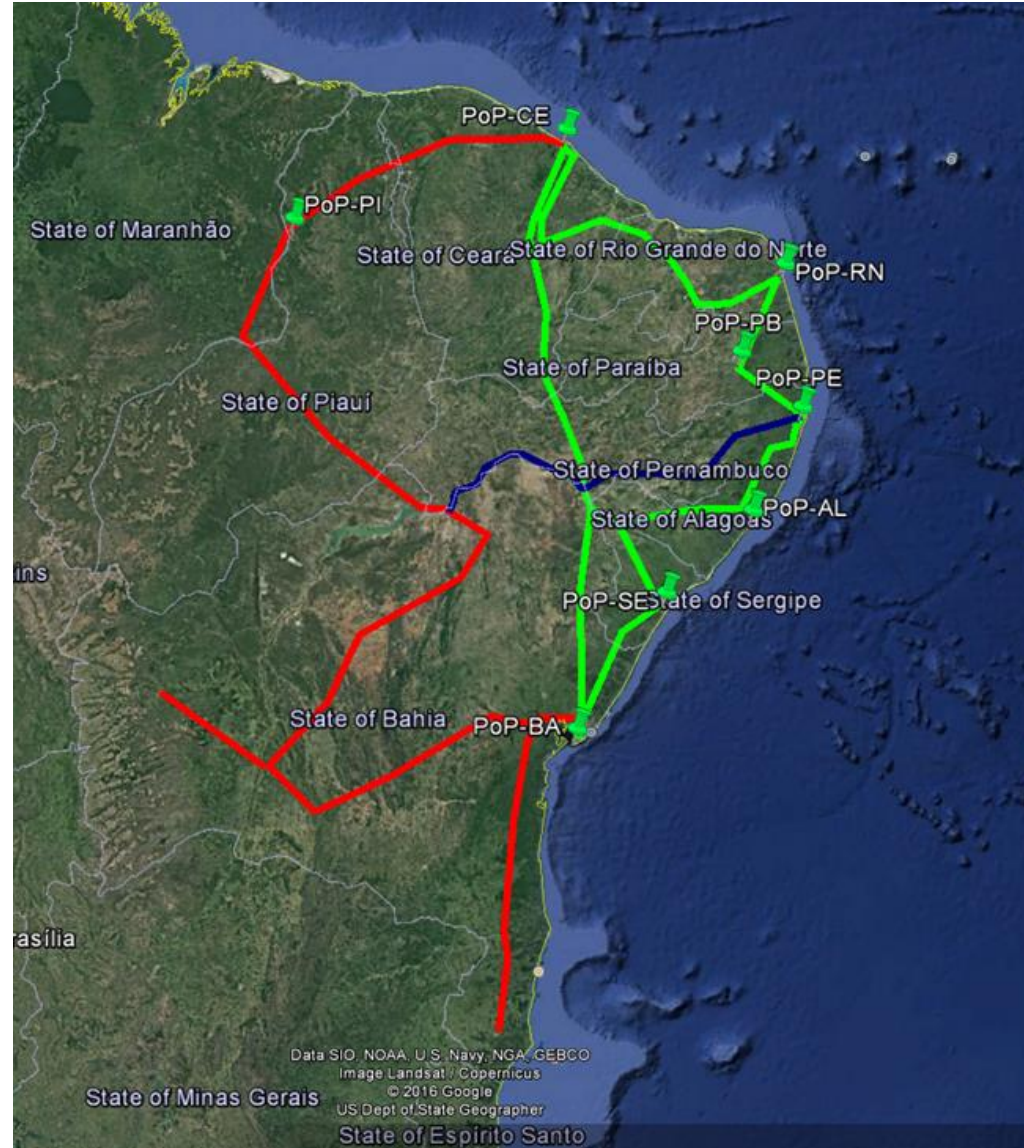
## Status of the agreements

- Agreements signed with Electric Power Utility Companies for the Northeast, Southeast (including part of Center-West) and for the South regions
  - Companies: Chesf, Furnas and Eletrosul
  - 20 years partnership
  - Agreement:  $\frac{1}{2}$  capacity (20 x 50 GHz channels for RNP)
  - These are mainly for RNP core network but customers on the fiber routes will be connected as well, when possible
  - In order to reach this scalability level to customers connections, we will continue talking with other possible partners (e.g.: local ISPs)



# Chesf Project – first agreement signed

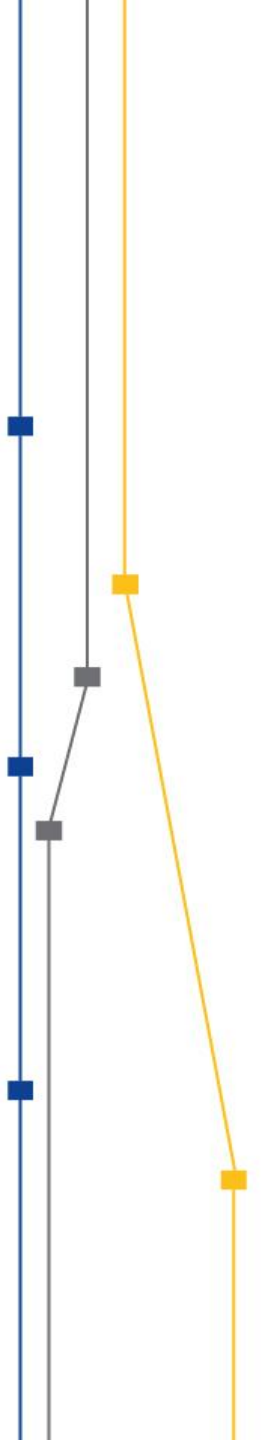
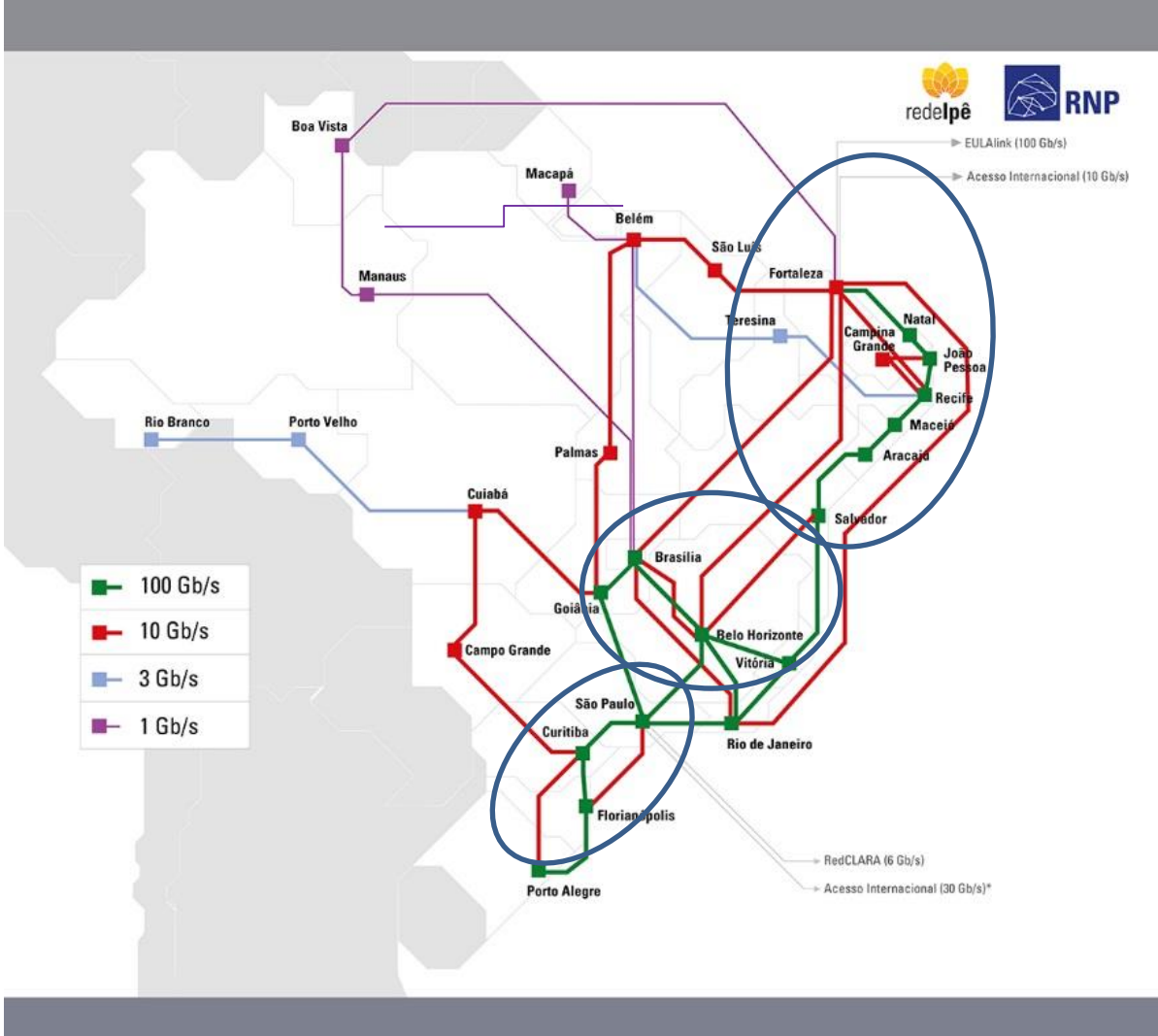
- **2 x 100G links operational**
  - RN-PB and PB-PE
- **Other 5 100G link to be activated by the end of the year**
  - All the green path
  - 7 PoPs connected in a 100G ring



# RNP National Backbone 2019

- **3 projects:**

- Northeast region (NE) Q4'2018
- Southeast region (SE) Q3'2019
- Southern region (S) Q3'2019

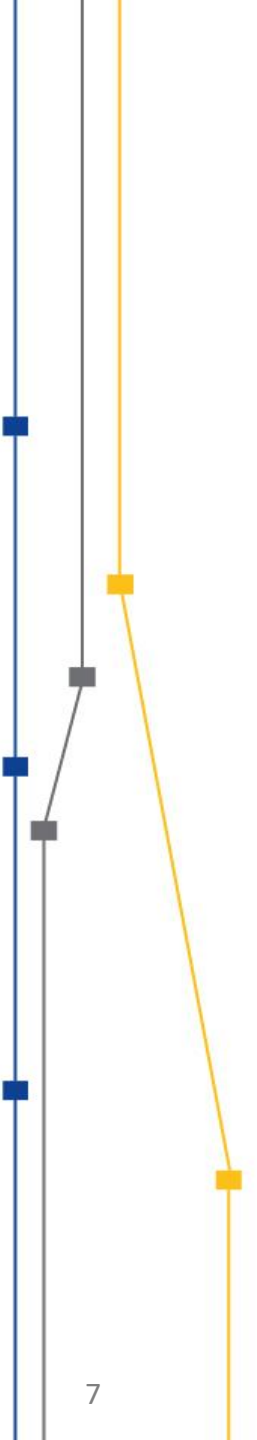


# LSST by RNP customers perspective

- RNP will make the efforts to provide a high speed link to the Brazilian R&E institutions that will have access to LSST Project
- Possible institution list could include (it is just a prospection, not a formal list):
  - LIneA
  - LNA
  - ON
  - UNESP
  - UNICAMP
  - UFRGS

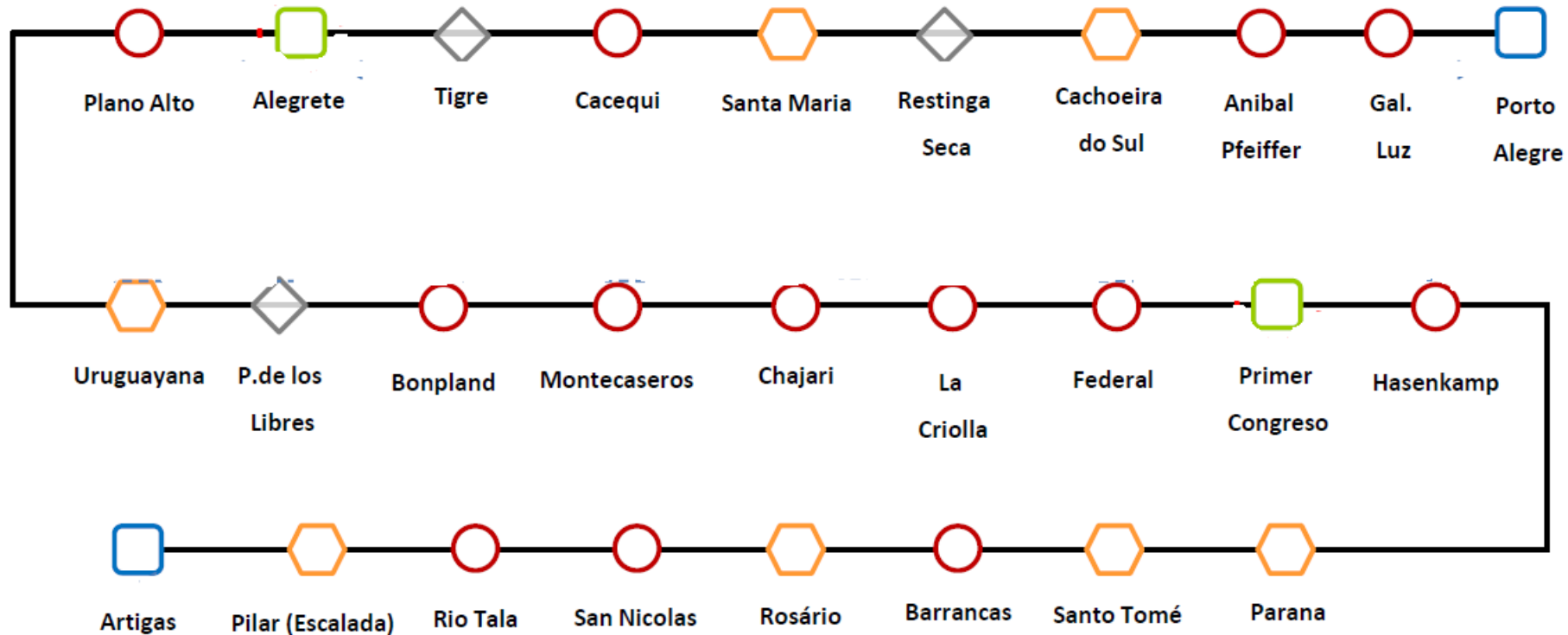
# LSST - Monet

- **RNP will light up a 100G channel in Monet system in 2018**
  - To be illuminate using a 37.5 GHz spectrum range
  - AmLight team working close to have this in place in benefit of all members
- **Expected to be operational by Q3'2018**
  - Miami – Boca Raton - Fortaleza
  - Fortaleza – Santana do Parnaíba/SP – Barueri/SP – São Paulo/SP



# Infrastructure for LSST outside RNP national backbone

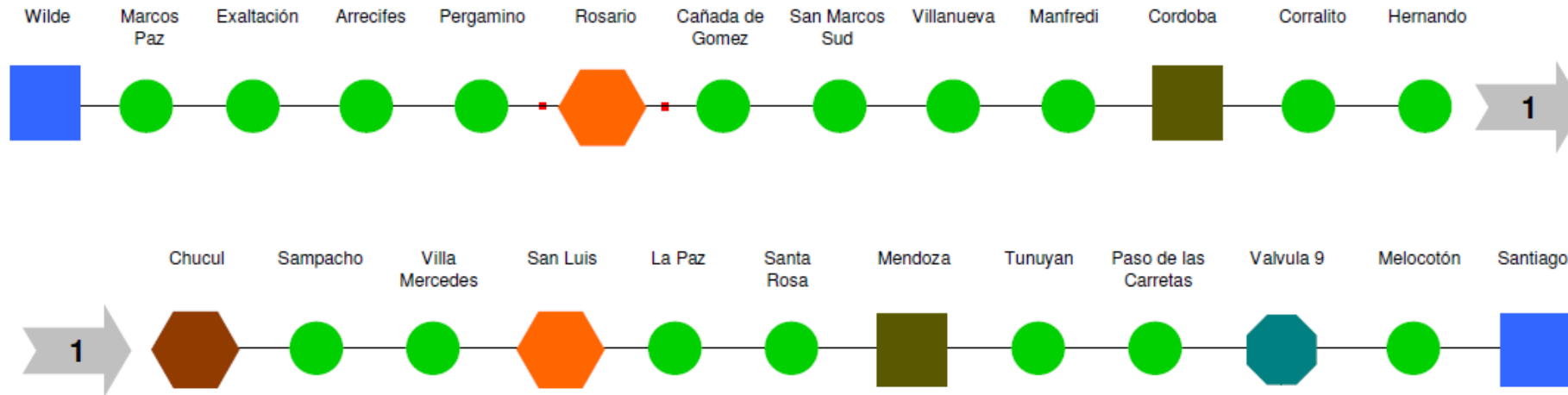
- **Porto Alegre/RS – Buenos Aires/AR**
  - Tender process should be finalized by end of this year
  - Estimation to be operational: June 2019





# Infrastructure for LSST outside RNP backbone

- **Buenos Aires/AR – Santiago/CL**
  - Path is ready to receive the 100G transponders
  - DWDM/DCI equipment still not selected



## Final words

- **RNP is committed to provide the infrastructure agreeded with both LSST and BELLA communities!**
- **By Q3 2019 we really expect to have all the transmission network along the paths BELLA (Fortaleza – Porto alegre) and LSST (São Paulo – Santiago) operational for our partners use.**



Thank you!

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