



# ALICE data transfer rates and DC 2024

L. Betev, M. Litmaath

# Planned and achieved data rates

Centre	Target rate GB/s	Achieved rate GB/s
CNAF	0.8	2 (250%)
IN2P3	0.4	0.8 (200%)
KISTI	0.2	1 (500%)
GridKA	0.6	2 (300%)
NDGF	0.3	0.4 (133%)
NL-T1	0.1	0.9 (900%)
<del>RRC-KI</del>	<del>0.4</del>	<del>0.53 (128%)</del>
RAL	0.1	0.7 (700%)
<i>CERN</i>	<i>10</i>	<i>20 (200%)</i>

- **ALICE target rates are defined for Run3/4 and remain unchanged**
- All rates tested and achieved during data challenges and subsequently in 2022/2023 (real data transfers)
- No data will be shipped to RU T1, all other T1s *can* and *have* pledged to absorb the difference

Target 2.5GB/s (T1s) + 10GB/s (T0)

# Rates rationale

- The rates to T0/T1s - proportional to the pledged resources of the corresponding centre
- Largest contribution are the Compressed Time Frames (CTF) - the ALICE equivalent of RAW data in Run3+
  - All data are located on the O2 disk buffer at CERN prior to transfer
- Most intensive transfer period - after the end of Pb-Pb data taking for the corresponding year
  - Copy the data to tape in 3-4 months after completion of data taking

# DC 2024 participation

- If the Pb-Pb data transfer is not completed yet - will continue with standard transfer programme
- If Pb-Pb is done - synthetic transfers up to the planned rates
  - In this case, the data will be removed after DC completion
- No software changes in the ALICE DM system foreseen
- TPC monitoring (xrootd) is available and good enough for us
  - A common monitoring system could in principle obtain the relevant data from MonALISA