

Global Science Network Forum: the storage challenge

Enzo Capone (GEANT), Eli Dart (Esnet)

TNC26 - Helsinki

8 June 2026



A bit of introduction

The concept

- Give the global R&E community more insights
- Help the scientific collaborations shape (or steer) their plans
- Anticipate future trends (scientific, technological, political, etc.)
- Co-develop solutions
- Support each other's mission

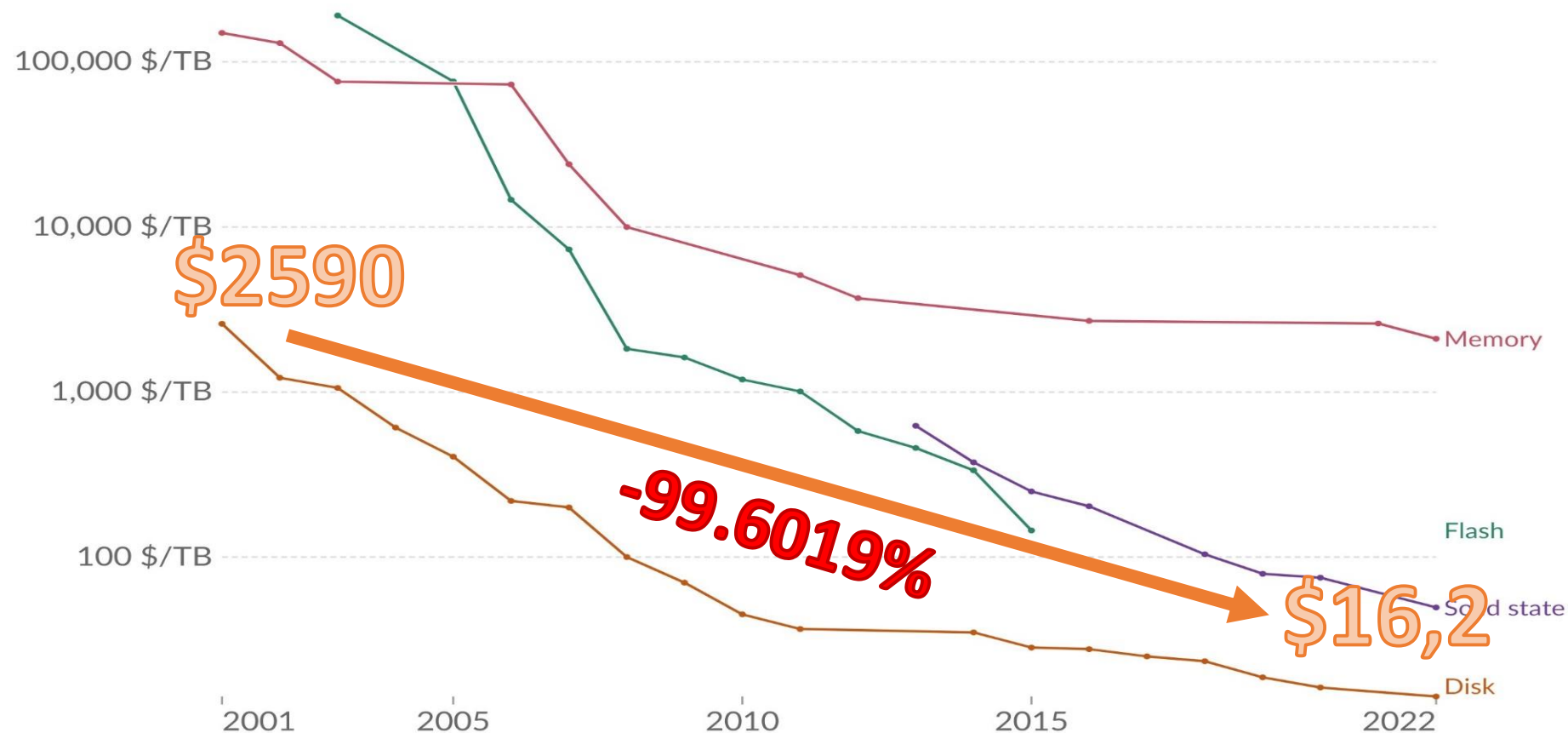
Steering group currently composed by:

- CERN (Eric Grancher)
- ESnet (Eli Dart)
- GÉANT (Enzo Capone)



Historical cost of computer memory and storage

This data is expressed in US dollars per terabyte (TB). It is not adjusted for inflation.



Data source: John C. McCallum (2022)

OurWorldInData.org/technological-change | CC BY

Note: For each year, the time series shows the cheapest historical price recorded until that year.

\$25,000,000

\$10
\$1
\$0

Access Deep Health & Wellness Insights with Whole Genome Sequencing

Shop Early, Save Big

30x Deep DNA Test: Was \$249 – Now \$175
100x Ultra Deep DNA Test: Was \$899 – Now \$699
Lifetime or annual subscription required

SHOP NOW

genome.gov/sequencingcosts



← Most Recent 🔍

Suggested Post ...

Sponsored • 🌐

LIKE PAGE

€399 Whole Genome Sequencing (100% of your DNA).
Now with a customized report on your condition!

Full DNA analysis

NOW ONLY 399€

LEARN MORE

30X Coverage Next Generation Sequencing (N...

👍 🤔 ❤️ 33

10 comments • 9 shares

👍 Like 💬 Comment ➦ Share

9

Agenda

- Enzo Capone (GÉANT) – Introduction (5min)
- Emanuele Vitali (LUMI) - LUMI - An overview on storage systems (25min)
- Eli Dart (ESnet) – PoV: streaming vs data copy, and you're the NREN (20min)
- Ian Collier (STFC) - Data management plans for the SKA Regional Centres (20min)

- Break (20min)

- Kalle Happonen (CSC)/Bo Nygaard Bai (DeiC) - A Pan-European Object Storage infrastructure (20min)
- Jakob Tendel (DFN) - The data movement problem(s) (10min)
- Q&A (25min)
- Enzo Capone (GÉANT) – Conclusion and next steps (5 min)

First things first...

- Sign up to the Global Science Network Forum mailing list:

global_science_network_forum@lists.geant.org

Homework

- NRENs to gather use cases related to user's data storage needs
 - Capacity upgrades
 - Topology changes
 - Special services
 - Consultancy
 - Bandwidth issues
 - etc.
- Selection of use cases to be showcased at the next GSNF event (likely TNC27)
 - Send your ideas to (before November 2026!) to:
 - global_science_network_forum@lists.geant.org
 - Vincenzo.Capone@geant.org
 - dart@es.net

Q&A

- Questions, doubts, proposals, thoughts...

Thank you

Any questions?

Presenter email

