HORIZON-EIC-2022-PATHFINDERCHALLENGES-01



Project No. 101115115

Interoperable end-to-end **P**latform of scalabl**E** and sustain**A**ble high-th**R**oughput techno**L**ogies for **DNA**-based digital data storage

Deliverable D7.3
Portfolio Event

WP 7 – Portfolio Event

Authors	Tomaž Karčnik, Luka Zupančič (BioSis), Miriam Frances (accelCH)
Lead participant	BioSis
Delivery date	31 July 2026
Dissemination level	Public
Type	Demonstrator

Version 01

European Innovation Council

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Innovation Council and SMEs Executive Agency (EISMEA). Neither the European Union nor the granting authority can be held responsible for them. Swiss participants in this project are supported by the Swiss State Secretariat for Education, Research and Innovation (SERI) under contract numbers 23.00332 and 23.00328.

Revision history

Author(s)	Description	Date
Miriam Frances (accelCH)	Draft deliverable	09.07.2026
Tomaž Karčnik (BioSis)	Revision 1	22.07.2026
Miriam Frances (accelCH)	Final version	31.07.2026

Contents

Revision history 2
Contents 3
Partner short names 4
Abbreviations 4
Executive summary 5
1 Introduction 6
1.1 Key facts 6
1.2 Objectives 6
1.3 Planning 7
2 Event Organisation 7
2.1 Communication and logistics 8
3 Final Event 9
3.1 Agenda 9
3.2 Implementation 11
3.3 Participants 11
4 Follow-up Activities 12
5 Conclusions 14

Partner short names

No.	Organisation	Short name
1	**BioSistemika**	BioSis
2	**Gottfried Wilhelm Leibniz Universität Hannover**	LUH
3	**Imagene SA**	IMG
4	**Technische Hochshule Wildau**	THWi
5	**Haute École Specialisée de Suisse Occidentale**	HES-SO
6	**accelopment Schweiz AG**	accelCH

Abbreviations

Abbreviation	Term
D	Deliverable
DoA	Description of Action
EC	European Commission
EU	European Union
HEU	Horizon Europe
PDC	Plan for communication and dissemination
SCDNA26	Storage and Computing with DNA 2026
WP	Work Package

Executive summary

Background

This deliverable 7.3 (D7.3) is part of Work Package 7 (WP7). The actual deliverable was the publicly accessible PEARL-DNA portfolio event, also called final flagship event, titled "DNA Data Storage from idea to applications". This brief report summarises the organisation and the development of the final event that brought together experts and end-users to explore the real-world potential of DNA-based data storage in the framework of the Storage and Computing with DNA 2026 (SCDNA26) conference from 27–29 May 2026 at the Università degli studi Roma TRE in Rome, Italy.

Objectives

The portfolio event aimed at sharing project results as well as challenges and opportunities of future DNA-based data storage in various domains. The importance of the development and implementation of commercial solutions was addressed since DNA-based data storage has reached a level of maturity where end-to-end systems can be demonstrated but commercial applicability still needs to be largely validated.

Methodology and implementation

This report is based on the project's Description of Action (DoA) and the activities described in D6.2, Plan for dissemination and communication activities (PDC), which set the goal to maximise the project results and promote their visibility among identified target groups. Communication and dissemination activities of PEARL-DNA have been taking place at different stages of the project lifecycle. D7.3 details and assesses the portfolio event that was organised by BioSistemika (BioSis) with the support by accelopment Schweiz AG (accelCH) and implemented at the end of the project to present outcomes.

Outcomes

Members from other projects and external experts in the field were invited to participate in the portfolio event, each of whom offered their unique perspective from working in their own specific fields. This approach facilitated strong collaborations towards a European network while also demonstrating the future of DNA Data storage applications.

Impact

The SCDNA26 conference, during which the PEARL-DNA portfolio event occurred, gathered 62 speakers and attracted more than 150 participants, of whom 130 attended in-person and the rest online. Everyone who joined the PEARL-DNA portfolio event was able to raise questions, and those attending in-person enjoyed various discussions while listening to the speakers.

Next steps

Next steps in the project involve making DNA data storage widely applicable in the field and gathering financial resources to follow up on the PEARL-DNA development.

1 Introduction

The PEARL-DNA portfolio event "DNA Data Storage from idea to applications" was held on Wednesday, 27 May 2026, from 15:45-16:30 (CET) at the Università degli Studi Roma TRE in Rome, Italy. Taking place during SCDNA26, the leading international conference in the field of computing and DNA-based data storage, the event fostered collaboration and offered an opportunity for scientists, researchers and innovators to share their perspectives, ideas and visions of the future.

1.1 Key facts

The portfolio event was based on presentations and discussions to explore scientific results, challenges and opportunities of PEARL-DNA. Organised by BioSis with support by accelCH, the event leveraged the attendance of the leading international SCDNA26 conference by more than 150 specialists in the sector to gather all relevant industrial stakeholders. It was advertised through the official project website, the project's social media channel on LinkedIn and respective partner networks.

Project coordinator Tomaž Karčnik from BioSis moderated the event, while each of the four invited experts, including Carlo Wesseling from the Netherlands Army, Andrej Filipčič from the Jozef Stefan Institute and CERN, Robert Grass from Haelixa and Vincent Franceschini from SNIA, offered their unique perspective from working in their own specific fields. Questions for these four panelists mainly covered the specific requirements of their fields and when and how they think DNA data storage can be applied there.

A video capturing the key highlights from the event, including a compilation of interviews with the speakers as well as photos taken during the event, has also been made available on YouTube and on the project website, to enable further dissemination of the project results.

The following pages contain a detailed description of the preparation, implementation and follow-up steps, including objectives, strategy, organisational and communication aspects, agenda, involvement of participants and conclusions.

1.2 Objectives

As the last activity of WP7, the portfolio event was held to share the PEARL-DNA advancements and to explore the challenges and opportunities of future DNA-based data storage across different application domains. The main aim of the event was to identify requirements, barriers and current issues regarding commercial viability, scalability, reliability and integration into existing infrastructures.

The event's occurrence during the SCDNA26 conference was leveraged to attract audiences from research institutions and the industrial sector, ranging from academia to R&D departments to end-user organisations and other EU-funded projects involved in related research areas. A target of more than 30 attendees, including members and interested representatives of the scientific community, industry and regulatory stakeholders, were invited to discuss results and give feedback on the project as specified in the PDC.

1.3 Planning

As proposed in the PDC, the portfolio event aimed at sharing the PEARL-DNA outcomes and commercial applicability with key stakeholders during a parallel event of an international conference on DNA-based data storage in 2026. The SCDNA26 conference was selected because it offers an opportunity for scientists, researchers and innovators to share their perspectives, ideas and visions of the future of DNA. This conference engages the global community that shapes the next generation of deep technologies while fostering collaboration to drive storage and computing with DNA-based data.

Potential formats and options were discussed during internal project meetings until the consortium agreed on holding a hybrid event, where the project coordinator and two invited speakers attended in person while the other two experts presented online via Zoom. The event was scheduled for the first program day of SCDNA26 as session 3 from 15:30-16:30 (CET) on Wednesday, 27 May 2026, which was set 15 minutes ahead of the event start to allow for dealing with technical glitches and checking online access. The conference room at SCDNA26 ensured a seamless experience for all participants because it was equipped with chairs, a podium, a screen and surround sound for teleconferences.

2 Event Organisation

The agenda for the PEARL-DNA portfolio event, also displayed in the official conference program of SCDNA26 (Figure 1), was determined by BioSis with support of accelCH, who also distributed event news on the official project website and on LinkedIn, the project's main social media channel.

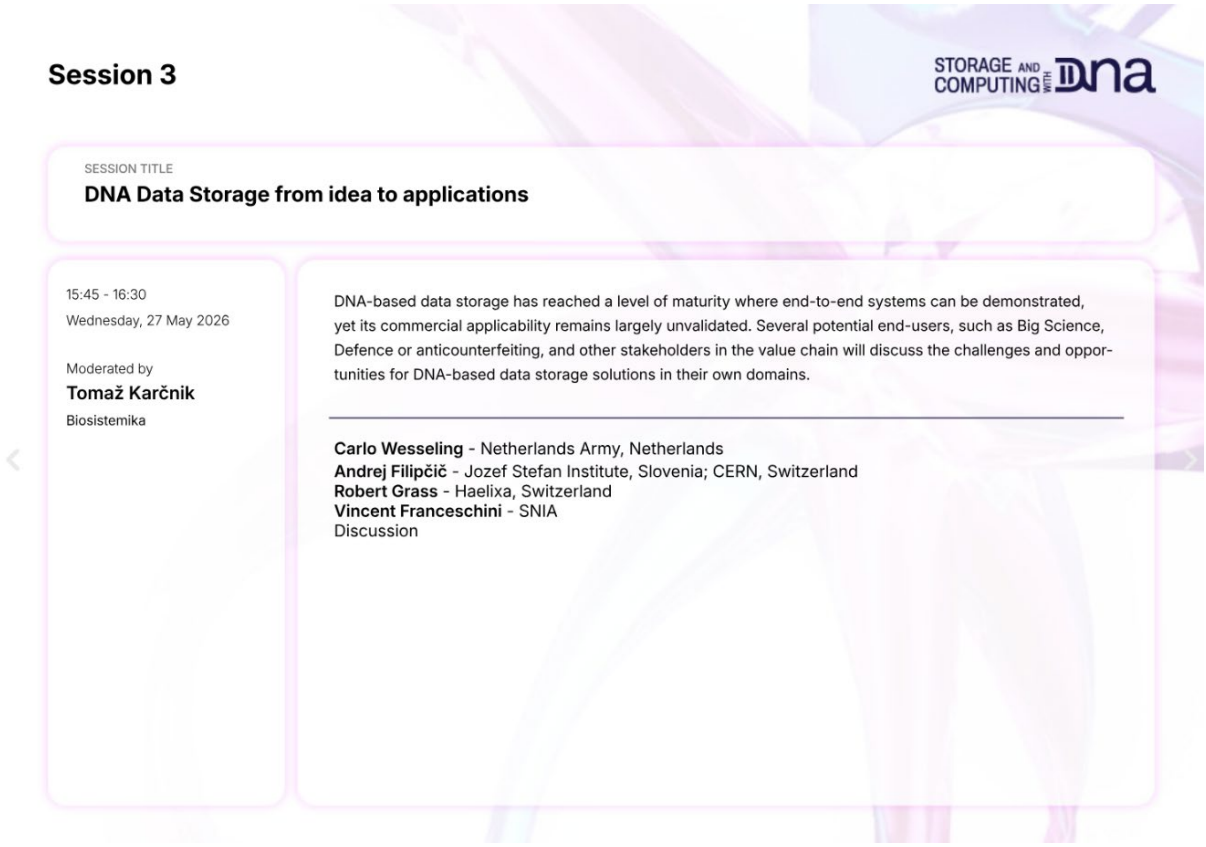


Figure 1: The PEARL-DNA portfolio event "DNA Data Storage from idea to applications" as displayed in the official conference program of SCDNA26, which took place from 27-29 May 2026 at the Università degli studi Roma TRE in Rome, Italy.

2.1 Communication and logistics

To increase interest in this portfolio event and to reach potential stakeholders, accelCH launched a social media campaign on LinkedIn that promoted the event more than one month prior to the date. Each individual post utilised the visual identity of the SCDNA26 conference, announced the final event as taking place during SCNDA26, provided more information about the conference, including a registration link, and introduced Tomaž Karčnik from BioSis, PEARL-DNA project coordinator, as a confirmed speaker (Figure 2). This outreach achieved a total of 1,446 impressions across two posts with several comments and reposts. All partners and organisers were tagged with their individual accounts to allow easier engagement.

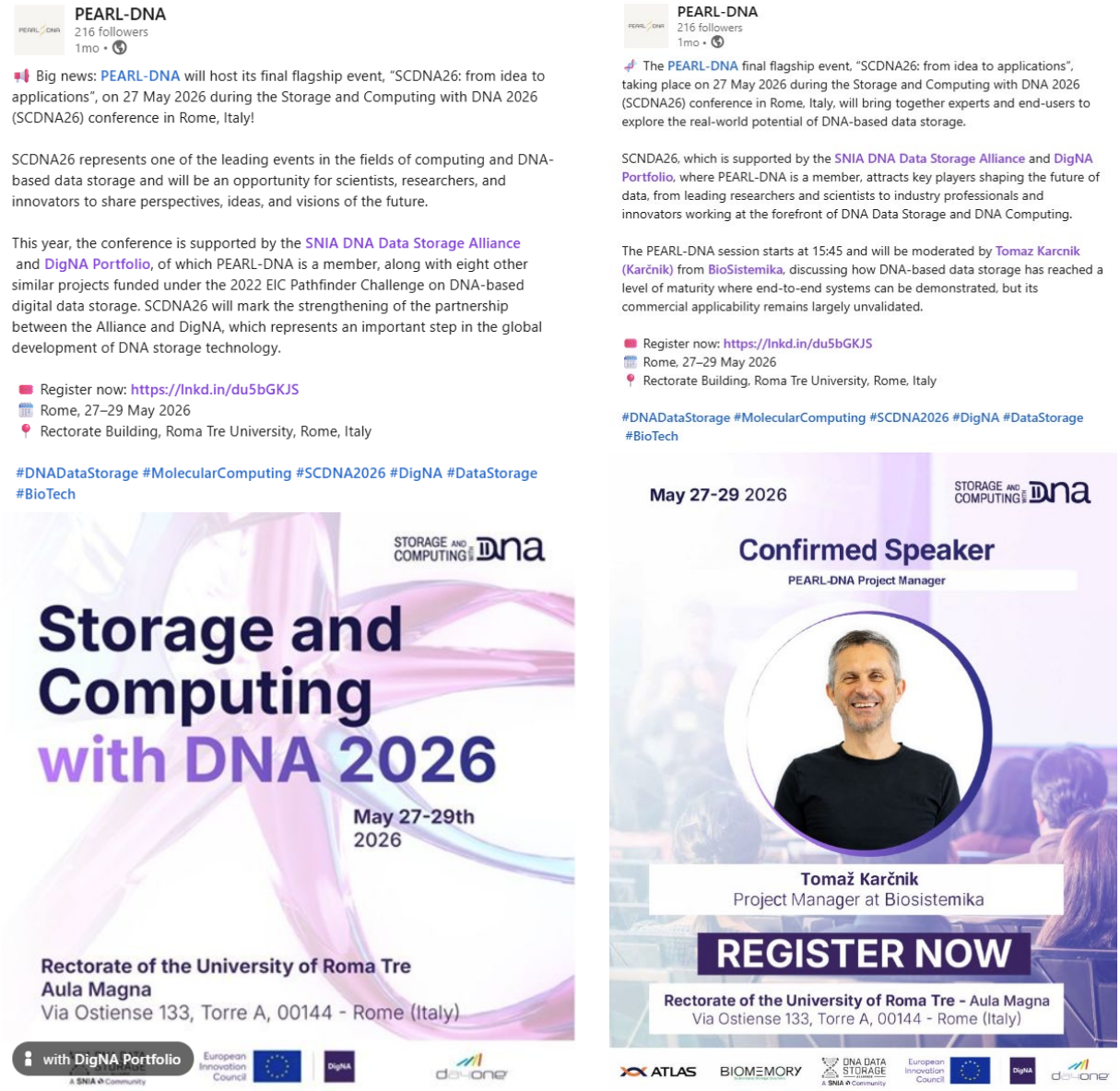


Figure 2: Two social media posts on LinkedIn announcing the PEARL-DNA portfolio event during the SCDN26 conference and project coordinator Tomaž Karčnik from BioSis as a confirmed speaker.

3 Final Event

The format of the PEARL-DNA portfolio event built upon different presentations given by four invited experts of which two presented in person (Robert Grass and Vincent Franceschini) and two online (Carlo Wesseling and Andrej Filipčič). PEARL-DNA project coordinator Tomaž Karčnik from BioSis moderated the event and introduced the panelists (Figure 3). During the session, the organisers observed who was connected and monitored the quality of the online view.



Figure 3: Project coordinator Tomaž Karčnik from BioSis moderated the PEARL-DNA portfolio event at SCDNA26.

3.1 Agenda

The agenda of the portfolio event was planned to cover a wide spectrum of distinct user and industry perspectives. In the beginning, project coordinator Tomaž Karčnik briefly explained the objectives of the session with a short presentation (Figure 4) before welcoming the four invited speakers.



Figure 4: The intro presentation given by project coordinator Tomaž Karčnik to open the PEARL-DNA portfolio event.

The event itself was scheduled for 45 minutes with five-minute time slots for the individual speakers, who each cited a different favourite aspect during their presentations:

1. For Carlo Wesseling from the Netherlands Army it was conversion for defense (Figure 5)
2. For Andrej Filipčič from the Jožef Stefan Institute in Slovenia and CERN in Switzerland it was huge data capacity for science (Figure 6)
3. For Robert Grass from Haelixa in Switzerland it was stability for product tracking (Figure 7)
4. For Vincent Franceschini from SNIA in the USA it was reduced cost for data centers (Figure 8)





Figure 5: Carlo Wesseling from the Netherlands Army talked about leading the transition to data centric operations.





Figure 6: Andrej Filipčič from the Jožef Stefan Institute in Slovenia and CERN in Switzerland talked about scientific data capacity.





Figure 7: Robert Grass from Haelixa in Switzerland talked about stability for product tracking.





Figure 8: Vincent Franceschini from SNIA in the USA talked about reduced total cost for data centers.

Lastly, the panellists answered the following questions at the end:

1. We now have end-to-end demonstrations. What aspect of DNA storage is interesting to your field? Where is it definitely not?
2. What is still missing to make DNA data storage widely applicable in your field?
    a. What level of reliability, cost, scalability, etc. is required?
3. What are the main barriers preventing adoption today?
    a. Do you think hybrid approach could speed-up the adoption process?
4. Is integration into existing infrastructure a concern?
5. Let's be concrete: where do you see specific DNA storage applications?
    a. Type of data, storage duration, access frequency, environment…
6. What do you think is needed to reach the tipping point for wider adoption?
7. Who is the decision maker that can approve the adoption of DNA storage tech in your organization?

3.2 Implementation

The portfolio event took place as a hybrid event within an international conference framework and focused on a key question for the field: DNA-based data storage has reached a level of maturity where end-to-end systems can be demonstrated, but what is still needed to validate its commercial applicability?

Interested stakeholders were able to participate in person or online via Zoom. During the session, each panellist highlighted a different aspect of DNA-based data storage relevant to their field, from covert storage and large-scale data capacity to long-term stability, reduced storage footprint and potential cost advantages. Together, their perspectives showed that future adoption will depend not only on technological progress, but also on clear use cases, validated performance, standardisation, and collaboration between researchers, end users and industry.

The subsequent panel discussion addressed where DNA storage could create value, what levels of reliability, cost and scalability are required, and what barriers currently prevent wider adoption. The speakers also reflected on possible hybrid approaches, integration into existing infrastructure, specific use cases, and the decision-making pathways needed to bring DNA storage technologies closer to real-world application.

The event demonstrated how PEARL-DNA contributes to building a European network around DNA data storage, connecting scientific development with future applications and commercial opportunities.

3.3 Participants

The portfolio event attracted many of the more than 150 participants from the SCDNA26 conference. The audience was able to raise questions and those attending in-person enjoyed various discussions while listening to the speakers.

4 Follow-up Activities

Shortly after the PEARL-DNA portfolio event concluded, a news item was published on the official project website and an accompanying social media post was posted on LinkedIn to announce that the session successfully showed the future of DNA-based data storage applications at SCDNA26 (Figure 9).

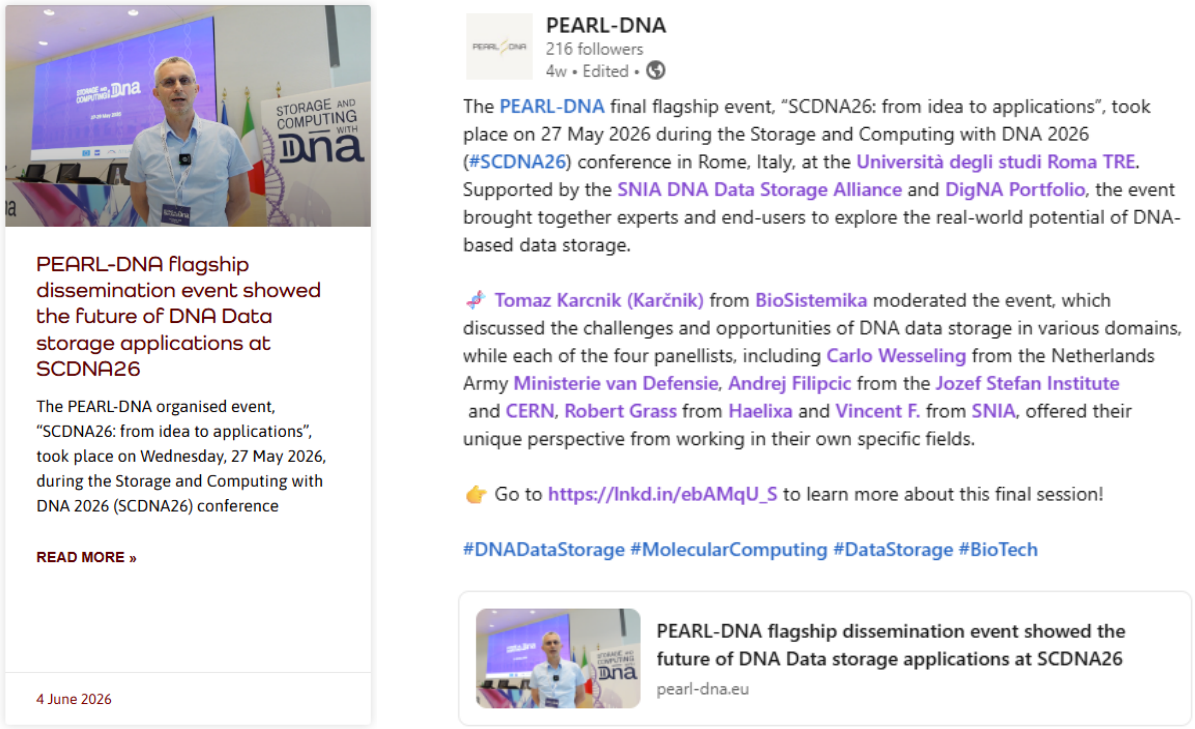


Figure 9: Soon after the PEARL-DNA portfolio event, a news item and social media post were published on the official project website and on LinkedIn to announce the successful conclusion of the session.

Additional dissemination activities followed in July 2026 to further share the impact of the event, which encompassed a video that was published on YouTube with key highlights (Figure 10), including interviews with the invited speakers (Figure 11) and several event photos (Figure 12), while another accompanying news item was added to the official project website and shared on LinkedIn (Figure 13).



DNA Data Storage: From Idea to Applications | PEARL-DNA Flagship Event | DigNA Portfolio

DigNA Working Group Chairs Discuss the Future of DNA Data Storage | DigNA Portfolio Meeting 2026

Dr Robert Harrison on IP Strategy for DNA Data Storage | DigNA Portfolio meeting

Figure 10: A video with key highlights from the PEARL-DNA portfolio event (left), including interviews with the speakers and event photos, was published on the project's YouTube channel.



Figure 11: The video with key highlights from the PEARL-DNA portfolio event contains interviews with the invited speakers Robert Grass from Haelixa (left) and Vincent Franceschini from SNIA (right), both of whom presented in person.



Figure 12: Also included in the video with key highlights from the PEARL-DNA portfolio event are photos taken during the session, for example showing the four invited speakers (left) and a slide from online speaker Andrej Filipčič from CERN.

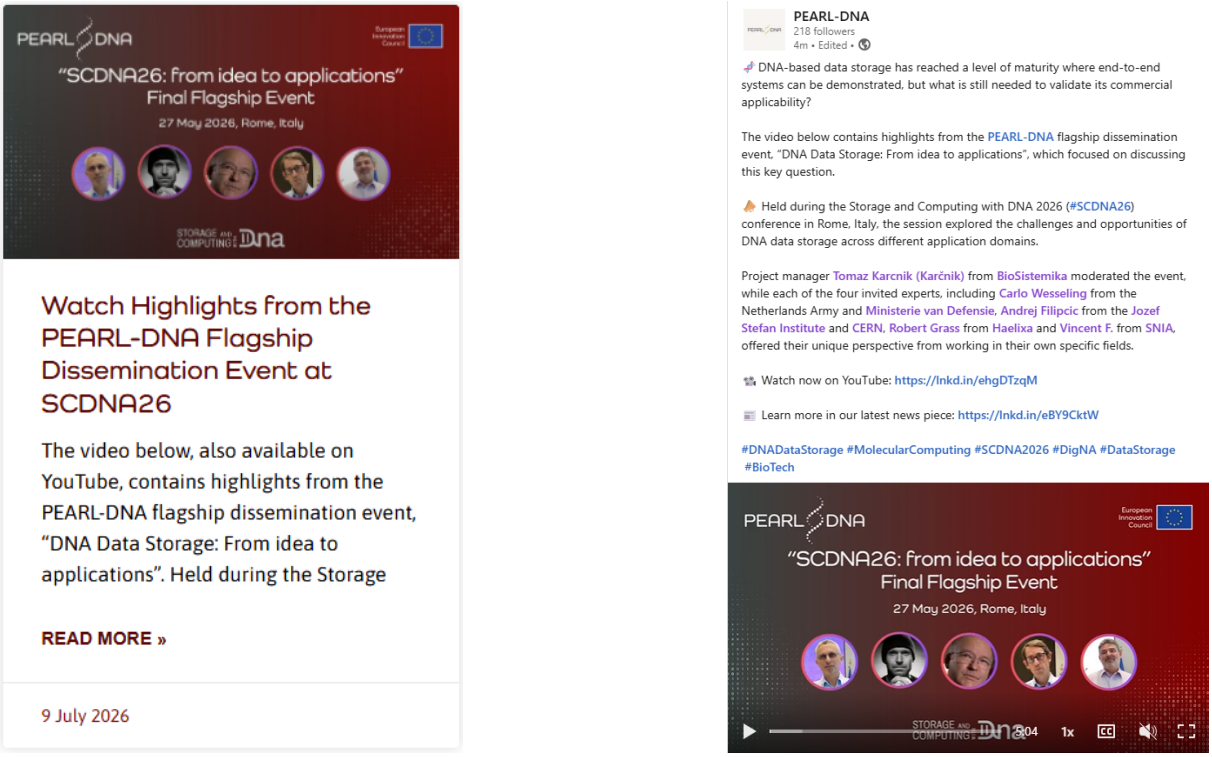


Figure 6: A news item on the official project website and a social media post on LinkedIn promoted to video with key highlights from the PEARL-DNA portfolio event.

Through the public disclosure and sharing of advancements by project partners and external visitors, it is envisioned that the impact of the project will also be generated in the long term. The event also promoted developments of future DNA-based data storage, demonstrating end-to-end DNA storage systems, while also emphasizing important remaining questions regarding commercial viability, scalability, reliability and integration into existing infrastructures.

5 Conclusions

With an excellent turnout of more than 150 participants at SCDNA26, of whom 130 attended in-person and the rest online, the PEARL-DNA portfolio event greatly reached its initial target of engaging 30 stakeholders. It proved to be a dynamic and engaging session, characterised by numerous questions from a diverse audience. The event served as an excellent platform to raise awareness about the project results and promoted interaction between potential new collaborations, all while gathering their valuable insights towards the research progress. The hybrid format proved to be significant in cost saving and, in addition, more people than anticipated had the opportunity to join (both speakers and attendees).

With the successful implementation of this event, the project not only met the objectives for its deliverable but also generated a wider impact with benefit to the scientific community in the field of DNA-based data storage. The space for open discussion and scientific exchange enabled the public dissemination of the research results for further development and uptake. Promoted achievements of the project can be of interest for further developments and potential collaborations. Moreover, by addressing early-stage researchers from various universities, PEARL-DNA contributed to increasing interest in the field by encouraging them to pursue a scientific career in research and innovation.

The final event was key in disseminating the outcomes, challenges and opportunities of the project both within the consortium and to external participants from academia and research organisations. In summary, the PEARL-DNA portfolio event can be deemed a success. The consortium now looks forward to further exploring common research areas and continuing to build upon this interactive exchange with interested stakeholders through new collaborative projects.