

IHE-Europe 25th ANNIVERSARY

IHE[®]
EUROPE | Integrating
the Healthcare
Enterprise

25

ANNIVERSARY



2004



IHE (Integrating the Healthcare Enterprise) was created with a simple but powerful idea: healthcare systems work best when they can communicate seamlessly. By defining standards-based approaches for sharing health information, IHE enables hospitals, clinics, and digital health solutions to exchange data reliably and efficiently.

Over the years, IHE has evolved into a global collaboration to improve interoperability and patient care worldwide.

A key driver of this success has been the **Connectathons**, large interoperability testing events where vendors, healthcare organizations, and technical experts collaborate to validate their systems against **IHE Profiles**. These Profiles provide implementation guidance for established standards such as HL7® and DICOM®, translating them into practical solutions for clinical use cases.

During Connectathons, participants follow defined test plans and peer testing, supported by experienced technical experts. This hands-on validation ensures that specifications are both theoretically robust and operationally reliable.

By turning written **standards** into trusted implementations, Connectathons accelerate interoperability and build confidence across the healthcare IT ecosystem.

Recognizing the importance of a strong regional foundation, a small group of European interoperability pioneers came together around **25 years** ago to establish **IHE-Europe**. Their ambition was to build a sustainable European platform for collaborative, real-world interoperability.

From the outset, IHE-Europe worked to connect national initiatives, align diverse healthcare systems, and foster dialogue among vendors, clinicians, policymakers, and standards experts across the continent.



2008

The following pages celebrate **25 years of IHE-Europe** initiatives and its Connectathons, milestones marked by collaboration and shared achievement. They reflect a journey shaped by commitment and community, and they aim to inspire the next chapter of interoperable healthcare across Europe.

GREETINGS FROM THE IHE-EUROPE CO-CHAIRS



Janos Vincze
(Vendor Co-Chair)

Throughout the years, I was inspired by the dedication, cooperation, and inventiveness of all the people associated with the IHE Europe community.

From the first Connectathons through the most recent interoperability activities, I had the chance to witness the power of a shared vision and collective work towards achieving positive changes in healthcare IT. It is impressive to consider how far we have advanced from the early, humble meetings of excited experts on a passion project, towards the multi-nation, vibrant community contributing to the definition of International Interoperability standards and implementation. I am honored by the success we have jointly accomplished, and I am looking forward to the many new opportunities before us, supporting health innovation across Europe.



Jan Hulek
(User Co-Chair)

IHE-Europe has always been about more than standards, it is about people, partnerships, and progress.

Seeing the growth of our community, the expansion and outreach of our Connectathons, and the increasing footprint of our IHE Standards across Europe has been a very rewarding journey thus far. Seeing each milestone, each successful test, and each new collaboration is a testament to the tireless work of hundreds of individuals working tirelessly towards a common goal.

However, as we look to the future, I firmly believe that our community has a role to play in bringing positive change and bringing our healthcare systems across Europe closer together.

The annual IHE Connectathon allows all companies, large and small, the opportunity to test their own products, across a variety of domains.

IHE
EUROPE

Integrating
the Healthcare
Enterprise

CONNECTATHON®

KEY FIGURES

HIGHLIGHT

KEY FIGURES

HIGHLIGHT

'01



Charenton-le-pont, France 🇫🇷

Companies: 12
Participants: 30
Systems: 18

IHE-Europe was founded and funded with the support of the EAR (European Association of Radiology), the French Society of Radiology (SFR), COCIR and GMSIH - Univ of Montpellier. IHE-France formed 2000/2001. Inria ran the Connectathon.

'02



Villejuif in Paris, France 🇫🇷

Companies: 32
Participants: 100
Connectathon floor: 130m²

IHE Italy and IHE Germany joined the event. New Profiles ARI and SINR.

'03



Aachen, Germany 🇩🇪

Companies: 43
Participants: 350
Connectathon floor: 135m²

First VIP Tours to Connectathon Floor. New Profiles BS(ATNA) and PGP.

'04



Padova, Italy 🇮🇹

Companies: 46
Participants: 180
Connectathon floor: 600m²

VIP Tours were a great success and expanded in 2004. New Profiles RID, CP, PICR FOR MPI and LSW.

'05



Noorwijkerhout, The Netherlands 🇳🇱

Companies: 75
Participants: 250
Connectathon floor: 800m²

Successful social event. New Profiles ATNA, XDS.a, CCW, EW, PDI, PDQ, RW, RID, RED and NMI. 23 Profiles tested.

'06



Barcelona, Spain 🇪🇸

Companies: 61
Participants: 250+
Connectathon floor: 600m²

New Profiles XDS-I, XDS-MS, EDC, ED, PAM and PSA

'14



Vienna, Austria 🇦🇹

Companies: 59
Participants: 265
Systems: 96
Monitors: 48

First Connectathon Whitepaper produced. IHE Services optional consultancy service to vendors. Athens eHealth Practical Interoperability Forum supported by IHE-Europe. New Profiles SWF.b, XTb-WD, XDS-MS, XDII, ECED, MAHD and XAD-PID CHANGE MGM. 70

'15



Luxembourg 🇱🇺

Companies: 66
Participants: 249
Systems: 82
Monitors: 55

Conformity Assessment Programme launched. IHE-Europe organised eHealth and mHealth Symposium, plus Medtel organised Interoperability event and related exhibition. New Profiles DBT, DS and IUA. 74 Profiles tested.

'16



Bochum, Germany 🇩🇪

Companies: 65
Participants: 303
Systems: 95
Monitors: 55

17 companies participated in the Projectathons. IHE-Finland formed & joins IHE family. The European Commission has identified 27 IHE Profiles ready to serve as a reference for public procurements.

'17



Venice, Italy 🇮🇹

Companies: 65
Participants: 303
Systems: 91
Monitors: 57

The European Commission adopted the 27 IHE Profiles for Public Procurement. New Profiles MHD and PDQM. 71 Profiles tested.

'18



The Hague, The Netherlands 🇳🇱

Companies: 60
Participants: 281
Systems: 83
Monitors: 65

Over 1000 delegates attend the Connectathon Week. Dutch WeeKconnect parallel programme with 60 sessions during Connectathon Week. IHE International celebrates 20 years of IHE! Eye Care Domain testing. 76 Profiles tested during the Connectathon.

'19



Rennes, France 🇫🇷

Companies: 64
Participants: 246
Systems: 80
Monitors: 52

IHE-Czech joins the IHE family. IHE Certified Professional Programme launched. New Profiles CDL. 68 Profiles tested during the Connectathon. IHE France organised Interoperability Event

'07



Berlin,
Germany



Companies: 61
Participants: 300+
Connectathon floor: 1200m²

First Monitors team picture captured. New Profiles IDCO, MI and XDS-SD.

'08



Oxford,
UK



Companies: 76

New Profiles IDCO, MI and XDS-SD. The snow interrupts the Connectathon start. Strong academic programme with support from the UK NHS organisation.

'09



Vienna,
Austria



Companies: 60

IHE Gazelle was used to help manage the Connectathon for the first time. New Profiles APR, XCA, XUA, DSG, IC, IRW, LCSP, PPW, TCE, XD*LAB. 45 Profiles tested.

'10



Bordeaux,
France



Companies: 64
Participants: 240
Systems: 110
Monitors: 34

10 years IHE-Europe! First time event was entirely managed by Gazelle. New Profiles DMS, EDPN, XDR-I, TN, MPQ, MAW, NN and MAMMO.

'11



Pisa,
Italy



Companies: 62
Participants: 253
Systems: 111
Monitors: 40

IHE-Services established. 2nd epSOS Projectathon. Launch of the IHE-Europe Website. New Profiles XDS-I.b, IDEC, CTNN, EDR, PDA, PR, PPOC, EDC, LDA, LSBL, XPHR, LTW. 56 Profiles tested.

'12



Bern,
Switzerland



Companies: 69
Participants: 296
Systems: 105
Monitors: 46

DICOM and IHE Pharmacy Meetings. Europe Meets Swiss Health / epSOS. New Profiles XCA-I, XCF, XDR-I and RES. 58 Profiles tested. Used Proxy & Order Manager. Multiple Affinity Domain.

'13



Istanbul,
Turkey



Companies: 64
Participants: 242
Systems: 92
Monitors: 49

IHE International World Summit. Parallel Turkish Symposium on Interoperability. New Profiles HMW, DE, DMS, XCPD, BPPC, MDI, STW and SVS. 63 Profiles tested.

'20



Online

Companies: 25
Participants: NA
Systems: 32
Monitors: NA

COVID-19 Pandemic forces March postponement to November with an Online Connectathon. 25 companies participated in the Connectathon Online VIP Tours. Monitors joined remotely from all over Europe. 45 Profiles tested.

'21



Online

Companies: 24
Participants: 100+
Systems: 31
Monitors: 30

20 years IHE-Europe! COCIR and IHE Joint publication on mHealth deployment. Over 11 Monitors operate remotely. 3-days of IHE-Europe Experience Sessions. New Profiles International Patient Summary tested for the first time. 45 Profiles to be tested.

'22



Montreux,
Switzerland



Companies: 40
Participants: 200
Systems: 53
Monitors: 40

Joint Connectathon with IHE USA, taking place in Atlanta, U.S. Visiting international delegations from Canada, Czech Republic, the Netherlands and Greece. IHE Connectathon and Swiss EPR Projectathon attendees tested for the first time in three years face to face.

'23



Rennes,
France



Companies: 52
Participants: 208
Systems: 68
Monitors: 50

200 participants taking part in the Projectathon organised by Agence du Numérique en Santé (ANS). IHE-Europe organised a two-day Experience Days conference. Unique social event organised by Kereval. 57 tested IHE Profiles.

'24



Trieste,
Italy



Companies: 49
Participants: 197
Systems: 62
Monitors: 40

Keynote by the European Commission at the Experience Days. The CapacityHD Masterclass took place. 74 IHE Profiles were tested. 4 IHE Plugathon tracks: IHE Profiles based on HL7[®] FHIR[®], one on the EHDS, one on AI & Imaging, and one on Energy.

'25



Vienna,
Austria



Companies: 48
Participants: 185
Systems: 53
Monitors: 42

The event took place at the impressive Allianz football stadium in Vienna. 55 IHE Profiles were tested. All tools hosted in the cloud, allowing for better preparation. A new version of the Gazelle Proxy used. Over 200 participants at the Experience Days.



Connectathon
website

OVER
25
YEARS

IHE-EUROPE CONNECTATHON HIGHLIGHTS

OVER
50,000
TESTS
PERFORMED

A test is a scenario derived from an IHE Integration Profile, designed to verify whether a system correctly implements the profile and can exchange data with other systems in real-world healthcare workflows.

OVER
6,500
PARTICIPANTS
ON THE
CONNECTATHON
FLOOR



2022

OVER
1,500
SYSTEMS
UNDER
TEST

A system is any software or hardware solution participating in the Connectathon, such as EHRs, PACS, LIS, or document repositories, tested for interoperability according to IHE profiles.

1040
MONITORS

many participated multiple times; over 60% returned for more than one Connectathon

OVER
300
COMPANIES
PARTICIPATED

HIGHLIGHTING KEY IHE PROFILES

MHD (Mobile access to Health Documents – FHIR/RESTful)

Builds on XDS.b principles but leverages FHIR and RESTful services, allowing modern, lightweight, and flexible document sharing across systems, particularly suited for mobile and web-based applications.

MHD

XDS.b (Cross-Enterprise Document Sharing, version b – ITI)

Enables cross-enterprise sharing of health documents via a registry and repositories, so different hospitals and clinics can exchange patient information seamlessly.

XDS.b

ATNA and RESTful ATNA (Audit Trail and Node Authentication – ITI)

Ensures security and audit tracking for health IT systems, logging who accesses what data to maintain privacy and compliance.

ATNA also supports RESTful FHIR transactions, enabling secure auditing in modern FHIR-based exchanges.

ATNA

SWF.b (Scheduled Workflow, version b – Radiology [RAD])

Provides standardized workflows for imaging procedures, coordinating tasks and results between imaging systems and healthcare staff.

SWF.b

A BIG SHOUTOUT TO THE CONNECTATHON MONITORS!

Over the years, these domain experts did more than validate successful connectivity; they guided participants on specification adherence, advised on resolving test issues, and ensured interoperability was maintained. Their constant presence onsite throughout the Connectathon Week is making a real difference in turning IHE Profiles into practical, trusted solutions.



2016

In tribute to **Brian Sanderse**, whose dedication to IHE spanned decades. Since the first annual IHE conference in 2004, Brian contributed tirelessly to promoting and supporting IHE in his role as monitor during several Connectathons. He was a valued member of the community, friendly, patient, and genuinely caring. His dedication and warmth will be greatly missed by the entire IHE community.

DOCUMENT SHARING IN IHE

The **IHE XDS** (Cross-Enterprise Document Sharing) profile, developed in the early **2000s** by **IHE**, provides a standardized framework for secure sharing of electronic health documents across organizational boundaries.

XDS defines a registry and distributed repositories model, enabling disparate systems to publish, find, and retrieve clinical documents in a vendor-neutral manner. It is one of the most tested profiles at IHE Connectathons. Building on XDS, IHE developed **MHD** (Mobile access to Health Documents) a HL7® FHIR® -based profile that enables lightweight, RESTful access to health documents, supporting mobile devices and cloud-based environments.

Together, XDS and MHD form the backbone of document sharing in many European and global networks, supporting millions of transactions annually and facilitating secure, cross-organization exchange of clinical information.



2020

MILESTONES

'00

'06

2011



The **Gazelle testing platform**, initiated in **2006** by IHE for the Connectathon ecosystem, has long been a cornerstone for interoperability and conformity testing, supporting IHE Connectathons. Over the years, Gazelle was extended to support eHealth projects such as **epSOS** (2008), where IHE-Europe coordinated the industrial partner team, contributing to the specification and testing strategy and organising epSOS "Projectathons"

GAZELLE



Today, Gazelle continues to underpin the preparation and validation of **MyHealth@EU** deployments, ensuring secure cross-border access to Patient Summaries and ePrescriptions for EU citizens. Looking forward, Gazelle will continue to evolve as the primary testing platform for IHE Connectathons and broader digital health initiatives.

27 PROFILES ENDORSED BY THE EU COMMISSION

In **2015**, the **European Commission** endorsed **27 IHE** (Integrating the Healthcare Enterprise) **Profiles** to strengthen patient care and facilitate secure access to medical information for healthcare professionals.

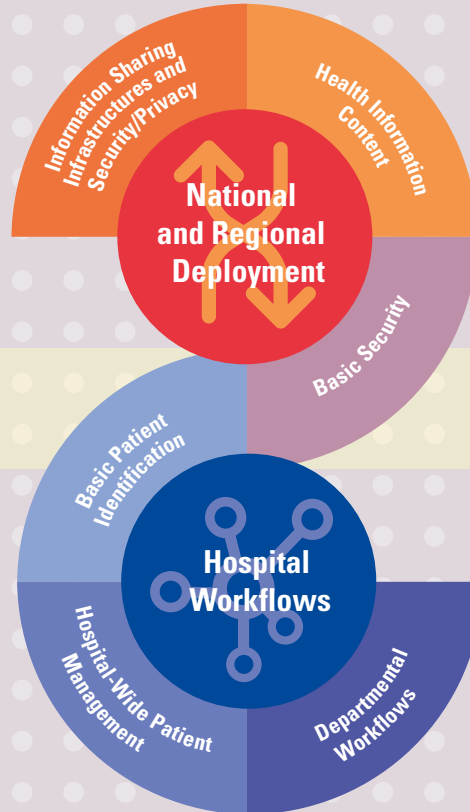
This endorsement provided clear directional guidance for the acquisition of healthcare-connected equipment, information systems, and associated services.

'15

Through these procurement processes, public healthcare authorities are encouraged to require that purchased systems comply with the **27 IHE Profiles**. This ensures that electronic health information can be exchanged reliably and securely, supporting interoperability and reducing the risk of incompatible solutions.

This initiative was the result of close and sustained cooperation between the **European Commission** (ReEIF, Annex II of Regulation (EU) No 1025/2012) and IHE-Europe, focusing on practical interoperability requirements and real-world implementation.

2025



CREATION OF IHE CATALYST

The creation of **IHE Catalyst** in **2021** strengthened the operational foundation of the IHE ecosystem by providing a dedicated non-profit organisation to accelerate adoption of IHE standards and support interoperability quality in health IT.

'21



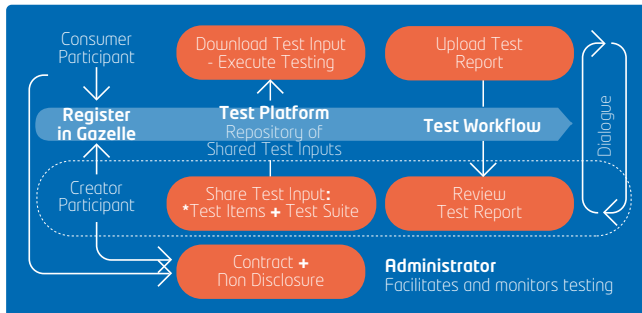
Jointly established by IHE-Europe and IHE USA, IHE Catalyst delivers professional services including test tool management, support for Connectathons and Projectathons, and expert assistance for deployment projects worldwide.



By advancing testing tools such as Gazelle and offering technical support to national and regional initiatives, IHE Catalyst helps implementers and policymakers turn strategic interoperability goals, such as those outlined in the EHDS White Paper, into real-world results.

IHE SHARAZONE

The **IHE SHARAZONE** is a continuous, 24/7 interoperability testing service focused on DICOM object exchange that complements the traditional IHE Connectathon. It was officially launched in **2021** and is built on the Gazelle test platform to enable peer-to-peer testing of medical imaging objects before and after products go to market.



» '21

As of 2026, IHE SHARAZONE supports 21 participating organizations, with 57 creator and 29 consumer systems and over 200 tested creator/consumer pairs reported.

SHARAZONE enables vendors to share, test, and review standardized objects in a neutral environment, accelerating early detection of interoperability issues. Its continuous testing with creator-provided plans enables frequent feedback, improving product integration and real-world deployment.

Growing adoption shows the industry's recognition of ongoing interoperability validation alongside events like the IHE Connectathon.



MCWG ON IMAGING

The **Multi-Country Working Group (MCWG)** on Imaging Information Sharing was formally established as a task force in IHE-Europe in late **2022**, with its membership and scope evolving through '23 and '24. It currently brings together 8 country members in active national deployments to deliver imaging information sharing and guidance for common extensions that enable a more effective deployment of IHE Profiles, DICOM imaging standards, FHIR, and related specifications within national eHealth services.

'22

The group's deliverables are mature, multi-country recommendations, developed through consensus, which can be readily adopted and integrated into national frameworks.

Recently, MCWG contributed to the Manifest-Based Access to DICOM Objects (MADO) Profile, supporting standardized cross-border retrieval of imaging studies in line with **European Health Data Space (EHDS)** requirements. Additional countries are welcome to join.

MCWG ON IMAGING

IHE CONNECTATHON SEAL

The **IHE Connectathon Seal** is a significant milestone in the evolution of the **IHE Connectathon**. Developed as a mechanism to recognise vendors' interoperability capabilities following hands-on testing, it is granted exclusively to vendors whose systems have successfully completed the rigorous testing of one or more **IHE Profiles** at an IHE Connectathon.



The **SEAL** is the only official international attestation issued by IHE that signifies excellence in interoperability implementation; it validates a system's interoperability performance and bears a three-year validity tied to the year of the Connectathon for which it was awarded.

IHE National/Regional Deployment Committees oversee the use of the SEAL to ensure compliance with policies, and awarded organizations are permitted to use the SEAL in publicity materials, with specific guidelines to ensure the integrity of the SEAL's representation.

'24

'25

EHDS WHITE PAPER

2017



The **IHE-Europe EHDS White Paper**, titled “**Leveraging the IHE Methodology to Accelerate the Successful Implementation of the European Health Data Space (EHDS)**”, was issued in January **2025** to guide stakeholders on how IHE's proven interoperability methodology can support the ambitious goals of the EHDS.

The white paper positions IHE's approach as a practical foundation for achieving interoperable health data sharing across Member States by mitigating risks and accelerating adoption. Drawing on decades of experience in interoperability standards and testing, it offers a framework to help healthcare providers, vendors, and national authorities implement EHDS requirements efficiently and cohesively, strengthening European-wide digital health ecosystems.



NATIONAL DEPLOYMENT COMMITTEES

The 11 active **National Deployment Committees (NDCs)** act as the primary national-level bodies within IHE-Europe. They take the complex language of interoperability and turn it into practical solutions that actually work in local everyday healthcare, helping systems connect, share, and support better care for patients.

National Deployment Committees understand that healthcare is local: shaped by culture, regulations, and the unique challenges of each country. By bringing together healthcare providers, technology vendors, and public institutions, NDCs help create a space where different perspectives meet, ideas are exchanged, and systems are built to work not just in theory, but in hospitals, clinics, and across borders.



2015

NDCs are central to coordinating the deployment of IHE Profiles at the national level. They provide guidance on how profiles can be implemented to meet local needs, support national infrastructures and healthcare projects, and organize local testing events to refine workflows and validate solutions.

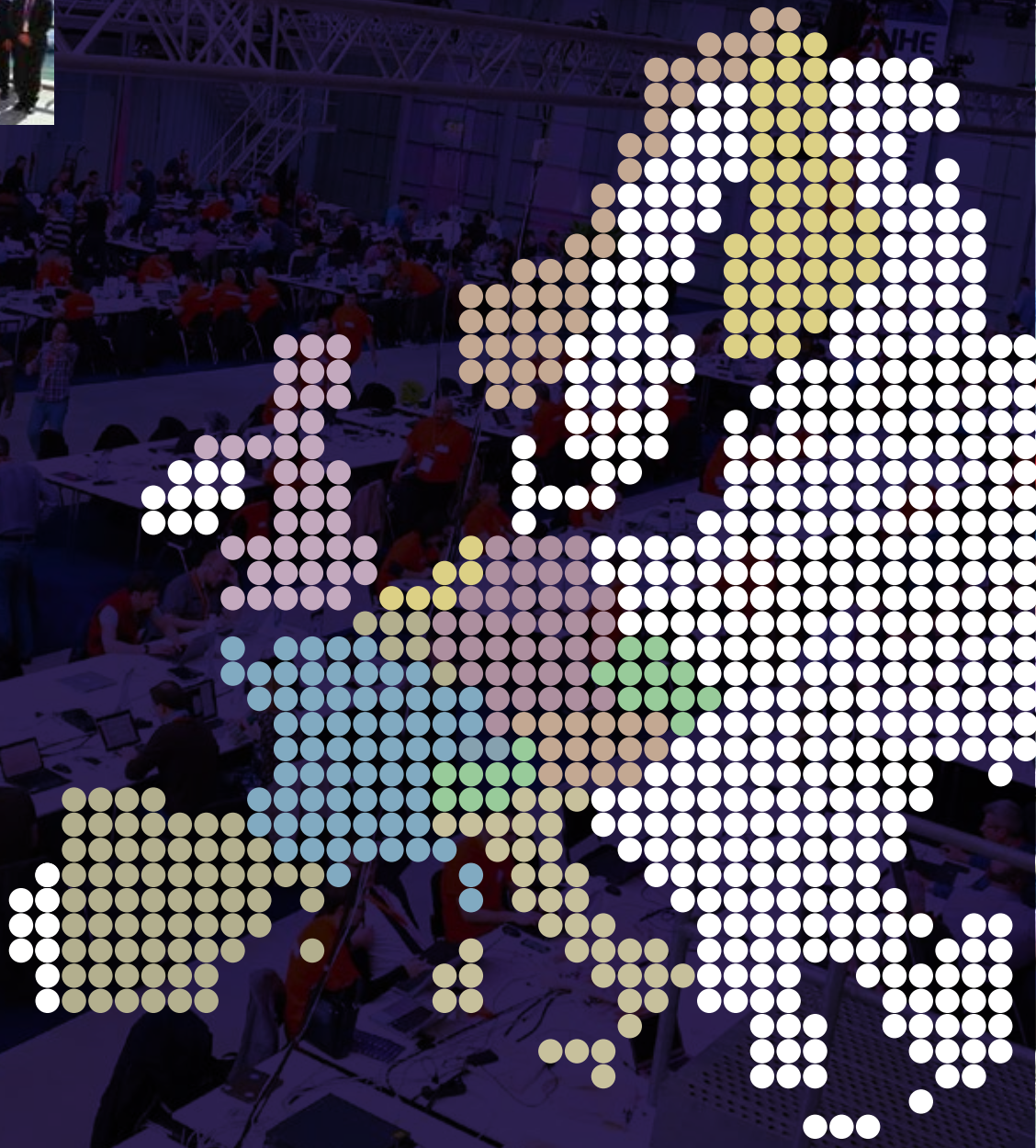
They also play an important role in education, offering training sessions and guidance in local languages to ensure that healthcare professionals and vendors can understand, adopt, and apply interoperability standards effectively. At the same time, they help ensure that national initiatives stay aligned with broader European and global digital health strategies, so lessons learned in one place can benefit others as well.

Through this work, **NDCs** foster collaboration and learning. They are connecting people, ideas, and technology, helping to turn the promise of IHE-Europe, healthcare that is interoperable, connected, and patient-centered, into reality across the continent.

2017



- AUSTRIA
- BELGIUM
- CZECH REPUBLIC
- FINLAND
- FRANCE
- GERMANY
- ITALY
- NETHERLANDS
- NORWAY
- SPAIN (SOON TO COME)
- SWITZERLAND
- UK



EURIDICE & IHE PRISM



In 2025, the **EURIDICE** (European Interoperability Specifications for Digital Solutions in Healthcare) initiative was jointly created by IHE-Europe and **HL7 Europe** to support the implementation of the European Health Data Space (**EHDS**) by developing high-quality, interoperable and testable technical specifications tailored to European needs.

EURIDICE acts as a bridge between European policy objectives, standards development and real-world deployment. By combining HL7 FHIR-based approaches with IHE's established profile methodology and testing processes, the initiative transforms regulatory requirements and community proposals into trusted, implementable specifications.

These outputs are designed to be consistently interpreted, easily adopted by vendors and health systems, and validated through testing events.

2025



In **2025**, **IHE PRISM** was also launched as the IHE framework designed to accelerate the development of interoperability solutions addressing priority market needs.

EURIDICE is embedded within the **EHDS-focused IHE PRISM** initiative, where it provides the technical content and specifications, while benefiting from PRISM's structured governance, prioritisation and testing environment. This integrated approach ensures that EURIDICE outputs are mature, validated and ready for implementation at scale across Europe.

Together, EURIDICE and PRISM contribute to turning Europe's EHDS vision into concrete, interoperable solutions that can be deployed with confidence by the healthcare ecosystem.

2019





A GLIMPSE INTO THE FUTURE

As we move forward, the future becomes less about the unknown and more about a common journey that has already begun. The last **25 years** have proved that the advancement of healthcare is not a function of technology but of people who believe that, together, they can make a difference. This remains our greatest guiding light. It will continue to guide us on how we innovate, how we collaborate, and how we ensure that healthcare technology benefits healthcare professionals, patients, and society at large. Interoperability will continue to develop with new technologies, new demands, and new challenges. But its underlying mission will remain the same: to make sure that information gets where it is needed, when it is needed, in a safe, meaningful, and trusted way. Initiatives such as the **European Health Data Space** demonstrate the importance of this mission, underlining the need for common ground, common standards, and collective action across borders to realize the full potential of health data.

What gives confidence for the years ahead is the strength of the community itself. Generations of professionals, newcomers and pioneers alike, continue to meet, test, learn, and build together. The **Connectathon spirit**, open, rigorous, and collaborative, will remain a place where ideas are challenged, solutions are proven, and shared understanding grows. It is here that the future quietly takes shape, one connection at a time.

With optimism and humility, we step forward. The future will require curiosity, grit, and collaboration across borders and sectors. If the last 25 years have shown us anything, it's that when a community is bound together by a shared sense of purpose and trust, progress is possible. **The future of interoperable health is not something we wait for, it is something we build together.**

