



ISO TC 197, WG 29

Basic considerations for the safety of hydrogen systems

Current Status & Proposed Work Plan

ELVHYS: 5th workshop: 05th June 2025

ISO/TC 197: Hydrogen Technologies

SCOPE

Standardization in the field of systems and devices for the production, storage, transport, measurement and use of hydrogen.

Secretariat: SCC (Standards Council of Canada)

Current Chair: Tetsufumi Ikeda (Japan)

- 22 published standards
- 28 standards under development
- 44 participating members
- 15 observing members

<https://www.iso.org/committee/54560.html>



ISO/TC 197 SC 1: Hydrogen at scale and horizontal energy systems

SCOPE

Standardization of large scale hydrogen energy systems and applications including aspects of testing, certification, sustainability and placement, and coordination with other relevant standardization bodies and stakeholders.

Secretariat: SCC (Standards Council of Canada)

- 1 published standard
- 7 standards under development
- 40 participating members
- 17 observing members

<https://www.iso.org/committee/9387084.html>

ISO/TR (TS) 15916: Current status

Basic considerations for the safety of hydrogen systems

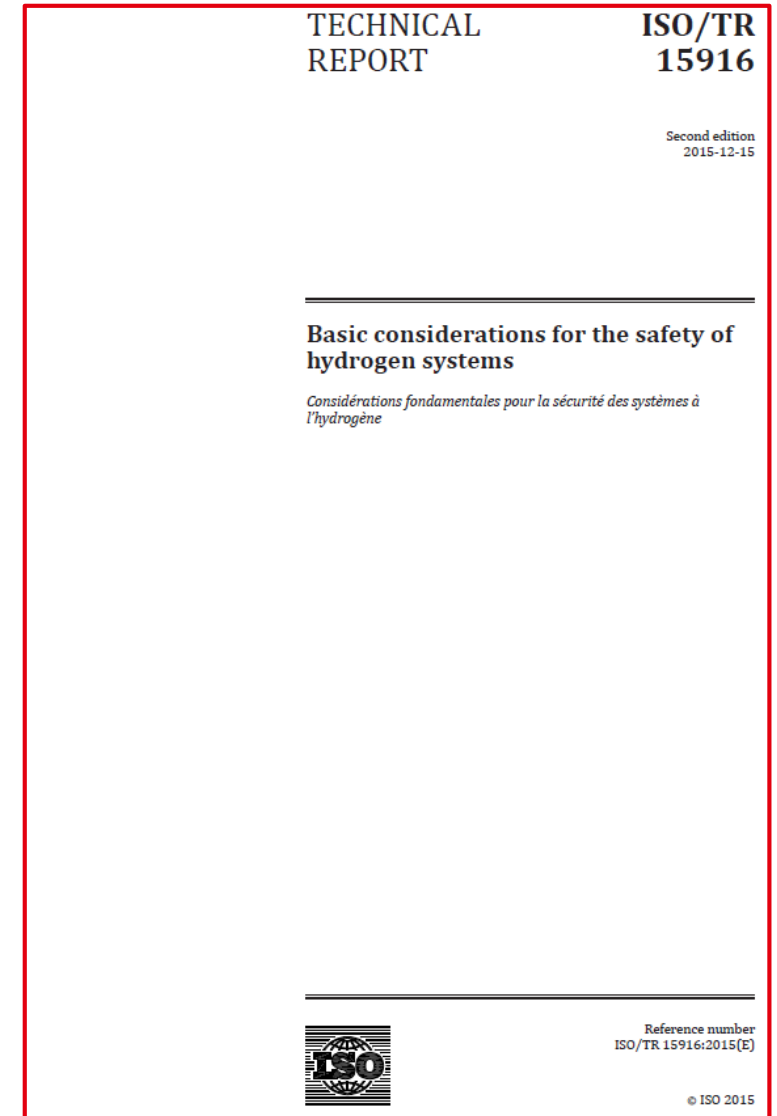
Considérations fondamentales pour la sécurité des systèmes à l'hydrogène.

Published as Technical Report (TR) in 2015.

2020: Revision process commenced in WG29, initially to specifically develop two specific areas:

- Material Compatibility
- Liquid Hydrogen

PDTR with amendments to cover these points issued for ISO/TC 197 ballot & comment in 2022.



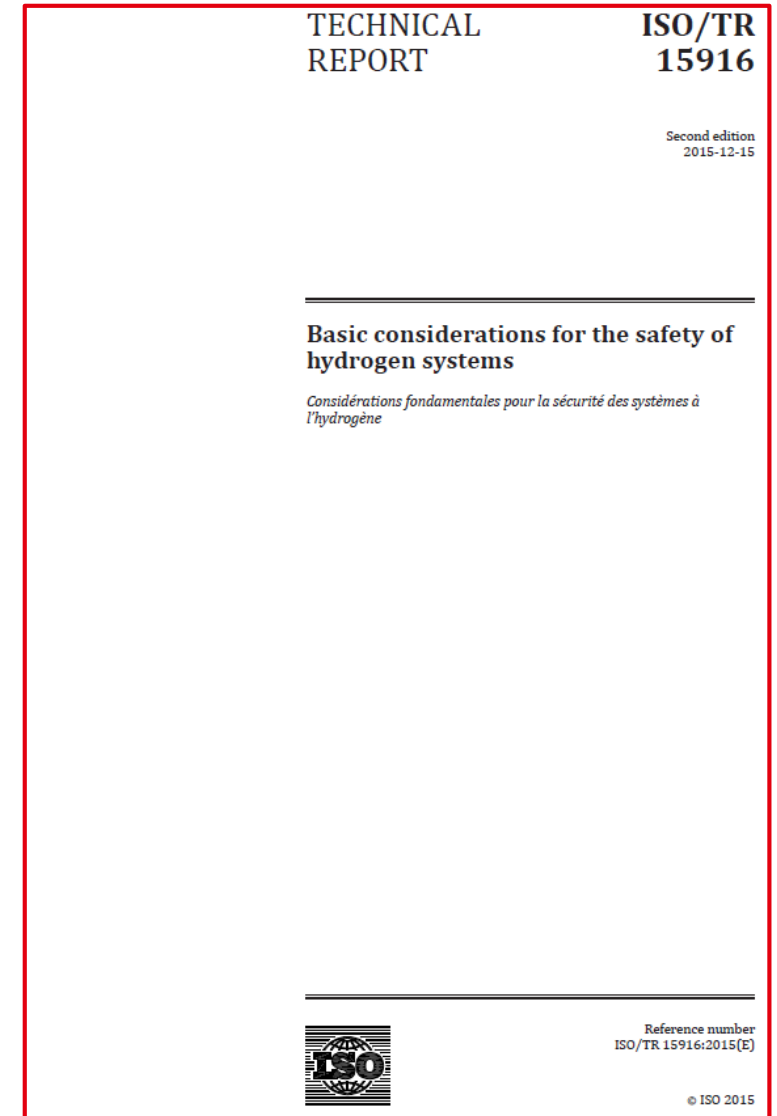
ISO/TR (TS) 15916: Current status

At time of ballot, rules for a Technical Report (TR) had changed, therefore to maintain existing language (all informative, but with recommendations) required publication as a Technical Specification (TS)

Some deliberation about changing all language in the document, or to develop and publish as TS. Ultimately it was decided to develop TS. Project initiated in 2024.

Led to 3 sets of comments to resolve:

- Outstanding (“out of scope”) comments from period between 2020 and 2022
- 2022 PDTR ballot comments
- 2024 TS initiation ballot comments



ISO/TS 15916: Current status

ISO/TC 197/WG 29 continued drafting of ISO 15916 as Technical Specification (ISO/TS 15916):

Convenor: Jay Keller

Project Leader: Nick Hart

Support from Sara Marxen and Karen Quackenbush

WG29 worked through all new and remaining comments to prepare draft for review by ISO/TC 197.

Expect ISO DTS 15916 ballot imminently.

ISO/DTS 15916

ISO TC 197

ISO/DTS 15916

ISO TC 197/WG 29

Secretariat: SCC

Basic considerations for the safety of hydrogen systems

Considérations fondamentales pour la sécurité des systèmes à l'hydrogène



ISO/TC 197/WG 29 **N 87**

ISO/TC 197/WG 29 "Basic considerations for the safety of hydrogen systems"
Convenorship: ANSI
Convenor: Keller Jay O. Dr



ISO PDTS 15916 - post meeting 14 - 2025_04_23

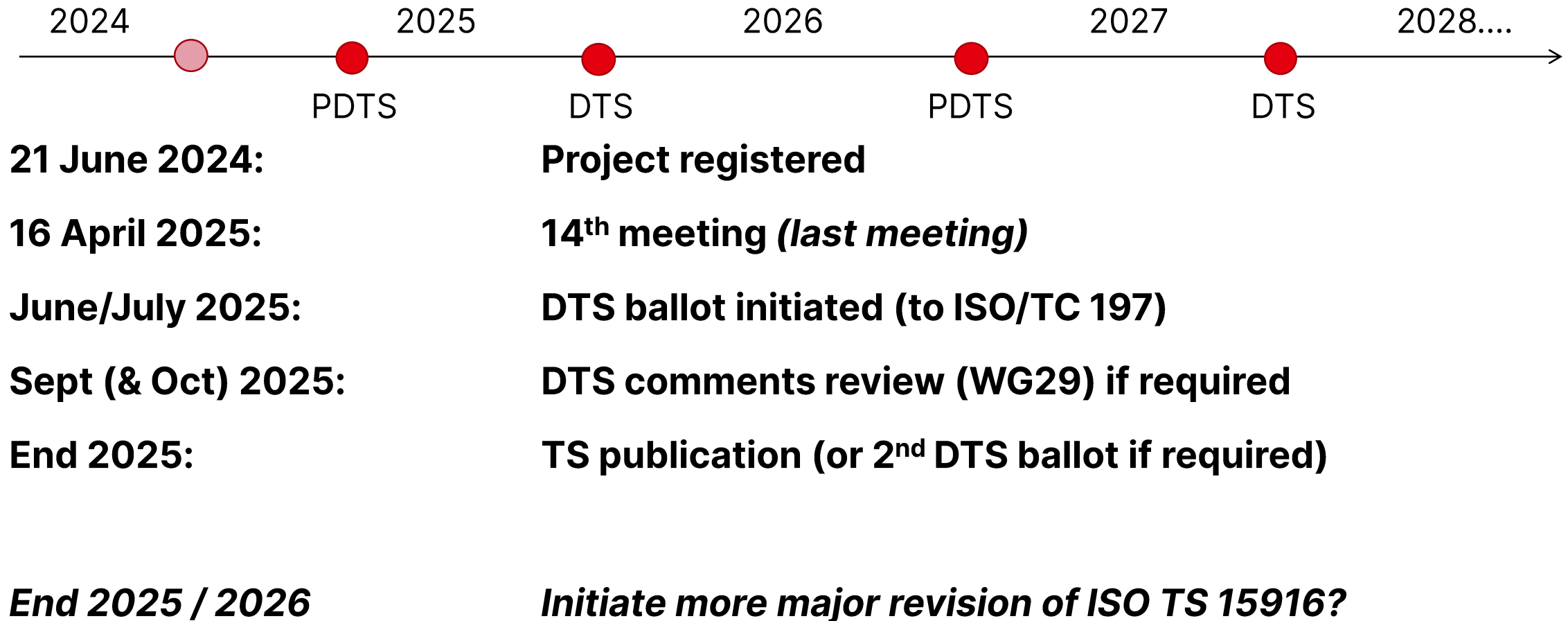
Document type	Related content	Document date	Expected action
General / Other		2025-04-23	INFO

Replaces: N 80 ISO PDTS 15916 - post meeting 13 - 2025_03_17 - clean

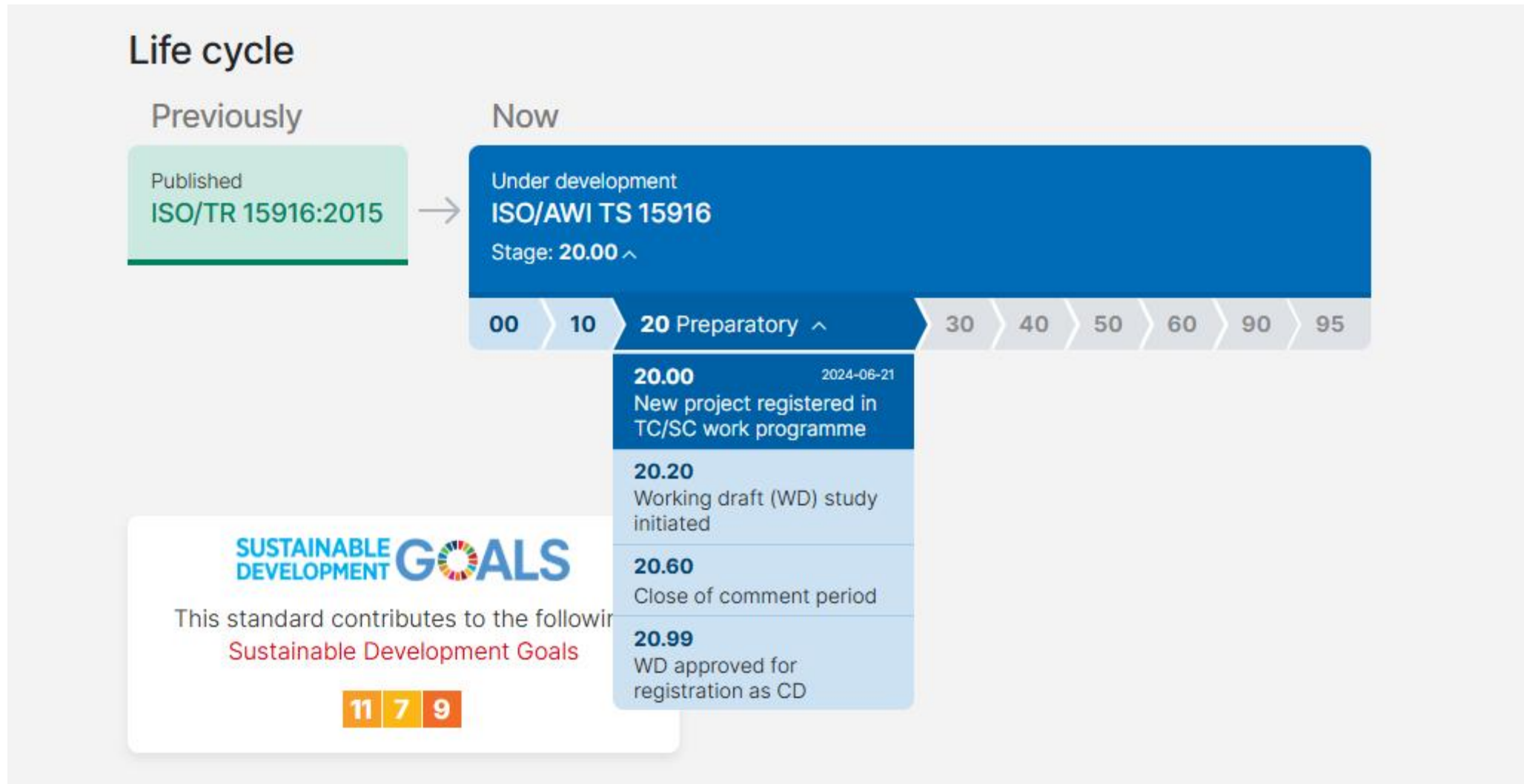
Description

Draft following meeting 14 on the 16th (/17th) April 2025, as sent to ISO/TC 197 secretariat for circulation to ISO/TC 197.

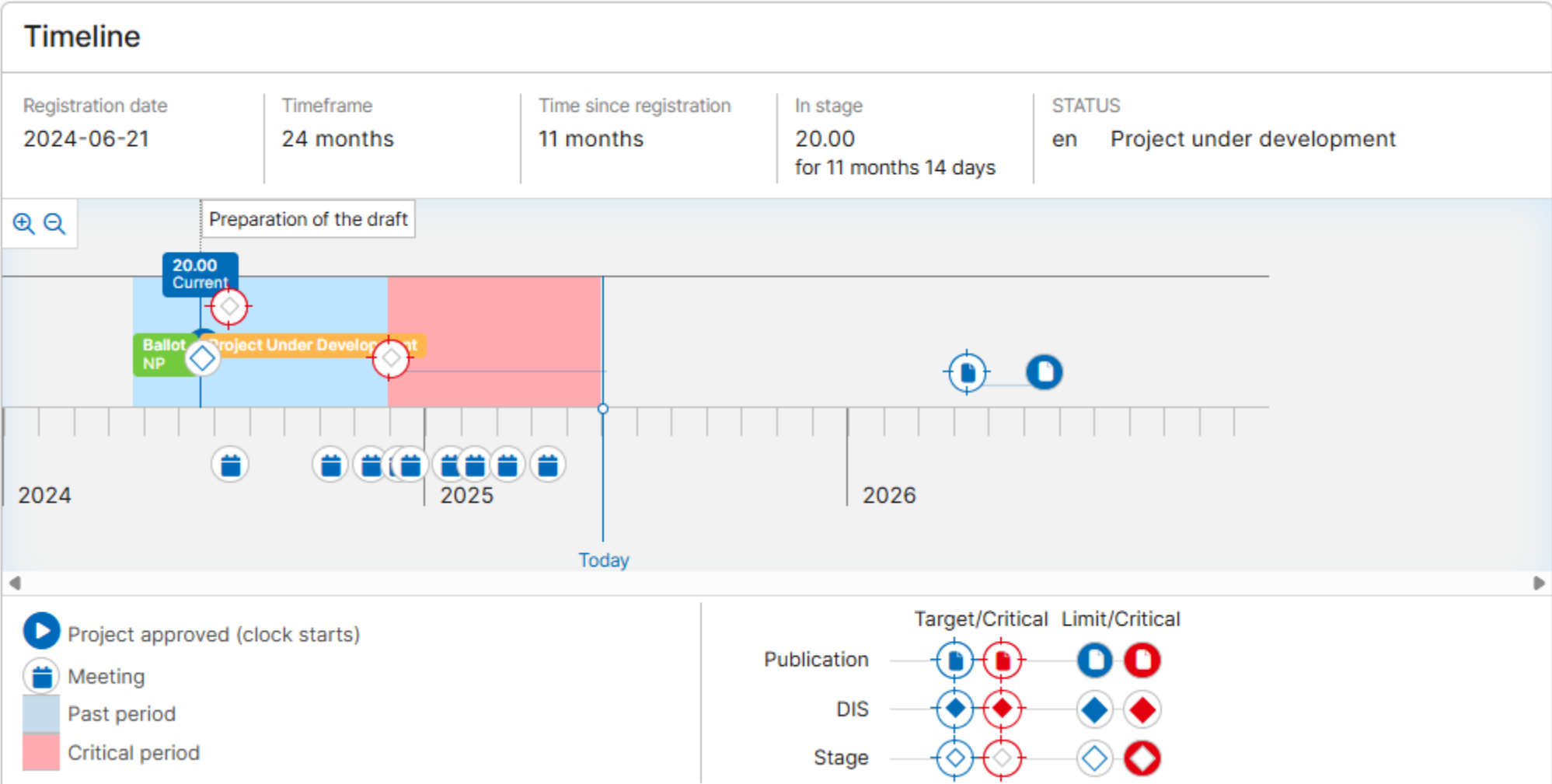
Project plan: ISO TS 15916: Development Timeline



Life Cycle – Current Status



Timeline



<https://sd.iso.org/projects/project/89423/overview>



Timeline, Including Extension

Stage i							
Stage	Version	Description	Go to draft	Target date	Limit date	Started	Status
00.00	1	Proposal for new project received				2024-04-23	Closed
10.00	1	Proposal for new project registered				2024-04-23	Closed
10.20	1	New project ballot initiated		2024-04-23		2024-04-23	Closed
10.60	1	Close of voting		2024-06-18		2024-06-19	Closed
10.99	1	New project approved				2024-06-20	Closed
20.00	1	New project registered in TC/SC work programme		2024-06-30		2024-06-20	Current
20.20	1	Working draft (WD) study initiated					Awaiting
20.60	1	Close of comment period					Awaiting
20.99	1	WD approved for registration as CD					Awaiting
30.00	1	Committee draft (CD) registered		2024-11-30			Awaiting
30.99	1	CD approved for registration as DIS					Awaiting
50.00	1	Final text received or FDIS registered for formal approval					Awaiting
60.60	1	International Standard published		2026-04-14	2026-06-20 i		Awaiting

<https://sd.iso.org/projects/project/89423/overview>



Next steps:

Once ISO/TS 15916 published in current form (limited activity in order to get new information from 2020-2022 activity into public domain, plus address any critical omissions from / corrections to the original TR), anticipate a more rigorous revision to remove duplication, and make document user friendly.

Intention to try to make it a document that can be cross-referenced in other standards (both ISO/TC 197 and others, such as IEC/TC 105 for fuel cells, and other new applications moving to hydrogen), to minimize duplication of basic recommendations (or requirements in future if normative language agreed to be used).

Anticipate 2026-2028 timescale for this activity.



Thank you.

Making lives *easier*, *safer* and *better*.

Nick Hart

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