

Update on ISO TC 265 – ‘Carbon Dioxide Capture, Transportation and Geological Storage’

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CSLF Technical Group, 17 June 2015

Update on ISO TC 265 – 'Carbon Dioxide Capture, Transportation and Geological Storage'



- 5th meeting was 26-30 January 2015 in Birmingham Alabama
- New information on slides is in **bold**

ISO TC 265 - CCS



- Proposed by Canada. Technical Committee TC265 was approved by ISO members in 2011. Canadian Chair, Canada and China Secretariat. 19 participating countries, 9 observer countries, 7 Liaison orgs (incl CSLF).
- IEAGHG actively involved as a Liaison Organisation
- Objective: to prepare standards for the design, construction, operation, environmental planning and management, risk management, quantification, monitoring and verification, and related activities in CO₂ capture, transportation, and geological storage.
- Excluded: ocean storage of CO₂ by direct injection; mineral carbonation storage; industrial uses of CO₂ not related to CCS; and legal liability and permitting.
- IS = International Standard; PWI = Preliminary Working Item; NWIP = New Work Item Proposal; TR = Technical Report; WD = working draft; CD = final draft to committee TC265; Mirror Committee = a national committee for inputting to TC265



ISO Standards Development Process

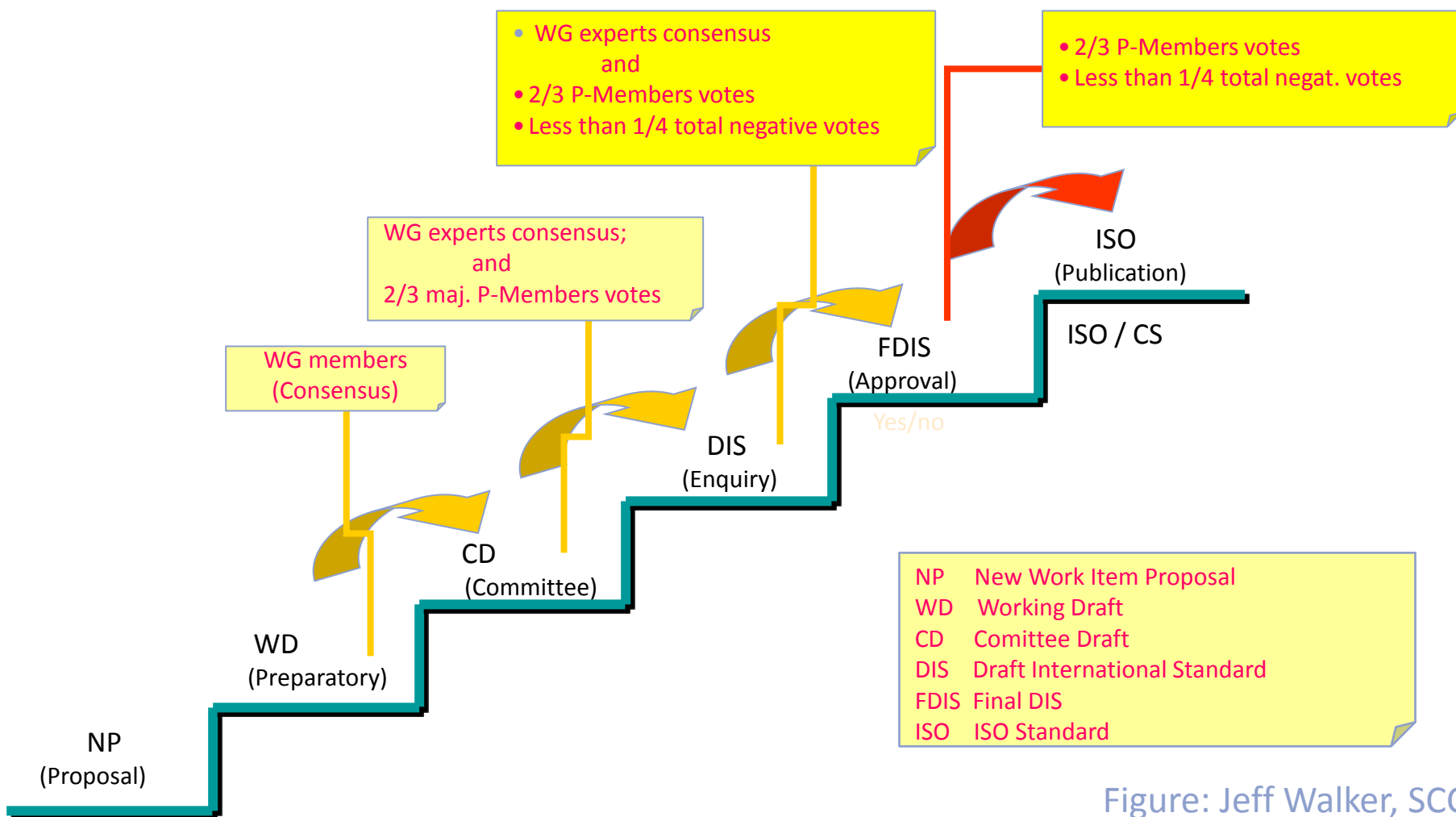


Figure: Jeff Walker, SCC

TC265 Working Groups



- WG 1 Capture – Japan
 - WG 2 Transport – Germany
 - WG 3 Storage - Canada and Japan
 - WG 4 Quantification and Verification – China and France
 - WG 5 Cross-cutting issues – France and China
 - WG 6 CO₂-EOR – USA and Norway
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- IEAGHG participating in TC265 plenary, WG 1 Capture, (WG2 Transport), WG 3 Storage, WG 4 Q&V, (WG 5 Cross-cutting), and Awareness Ad Hoc Group (Outreach)

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WG 1 Capture

- TR in 1.5 – 2 years. Draft TR by Q3 2014. IS by 2017
- **Produced a draft Technical Report on capture technologies – DTR-27912. Out to TC265 for comments by 7 June.** Scope is pre, post, oxy, power, cement, steel, industrial gas production
- IEAGHG (Stanley Santos) – Section Editor for Oxy and Steel
- **NWIP for an IS on “Performance evaluation methods for post-combustion CO₂ capture integrated with a power plant” issued to TC265 for voting**

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WG 2 Transport

- Draft IS on CCS Pipeline Transportation Systems. Offshore and onshore pipelines. Seed document is DNV RP J202. IS by Oct 2016
- **Draft IS CD-27913 issued for comments by TC265 by 2 Dec 2014.**
- **427 comments. Approved to move to draft IS (DIS), will be sent out for approval.**

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WG 3 Storage

- NWIP to produce IS. Using CSA Z741 as ‘seed document’
- Saline aquifers and hydrocarbon reservoirs without hydrocarbon production
- IS by June 2017
- IEAGHG (Tim Dixon) on Tech Panels for M&V and Closure
- WD circulated to WG3 for comments by Sep 2014. **800+ comments addressed at Birmingham.**
- **No show-stoppers, but varying levels of detail in different sections.**
- **Draft IS CD-27914 will be ready to be submitted to TC265 vote summer 2015.**

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WG 4 Quantification and Verification

- Objective : GHG emissions performance.
- Produce TR first (1-2 years) then IS(s)
- NWIP approved by ballot :- concerns on process and too prescriptive eg define purity, specify monitoring technologies. Revised outline agreed – not prescriptive
- IEAGHG (Tim Dixon)
- Drafting committee formed for TR 27915.
- Interaction with other WGs
- **Progressing slowly on TR-27915. Scope further refined. Drafting at advanced stage. Aim is for CD by June 2015 for TC265 comments..**
- **WG6 (EOR) interaction and concerns**

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WG 5 Cross Cutting Issues

- Develop IS for Terminology “CCS Vocabulary” – France lead.
- ISO CD 27917 (was 19251) CCS Vocabulary
- **CCS Vocabulary working draft IS CD-27917 issued for comments by 29 Dec 2014.**
- **Concern over timings with other WGs, so CD-27917 will be revised and send out as 2nd CD later in 2015. Extend time to 4 years.**
- Future work
- **NWIP on TR on ‘Lifecycle Risk Management for Integrated CCS’ (China lead) – approved by TC265 voting. Draft TR by May 2016. Assess overarching aspects of risk analysis which fall outside other WGs. Determine whether any IS needed.**
- **Preliminary proposal (PWI) to research stakeholder engagement**

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WG6 on Storage using CO2 EOR

- USA and Norway lead
- Recognises geological and operational differences to DSF storage
- Will avoid duplication with WG3 – focus on CO2-EOR specific topics
- Working to produce IS
- **Discussion on structure and sub-groups**
- **To discuss concerns with WG4**
- **Meeting in June 2015 in Houston**

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- **TC265 appreciated GHGT-12 Panel Discussion. Good attendance and questions. Recruited new members.**
- **Participating countries:**
Australia, Canada, China, France, Germany, Italy, Japan, Republic of Korea, Malaysia, Netherlands, Norway, **Saudi Arabia**, South Africa, Spain, Switzerland, United Kingdom, United States, India, Sweden
- **Observers:**
Argentina, Brazil, Czech, Egypt, Finland, Iran, NZ, Serbia, Sri Lanka,
- **Liaisons:**
IEAGHG, IEA, GCCSI, CSLF, WRI, EIGA, **CO2GEONET**

Future ISO TC 265



- **Next meeting:**
- **7-11 September 2015, hosted by DNV at Oslo, Norway**

- Public information on the work is available at http://www.iso.org/iso/iso_technical_committee?commid=648607

Thank you

Any Questions?