



ISO CO₂ Storage

ISO TC 265

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CTS Workshop, IEA, Paris

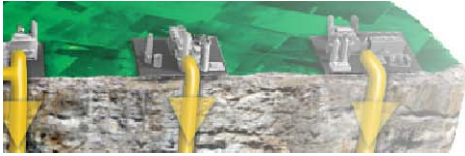
16 May 2017

ISO TC 265 - CCS



- Proposed by Canada. Technical Committee TC265 was approved by ISO members in 2011. Canadian Chair, Canada and China Secretariat. **18** participating countries, **10** observer countries, 7 Liaison orgs.
- IEAGHG involved as 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.
- NWIP = New Work Item Proposal; TR = Technical Report; WD = working draft; CD = final draft to committee TC265; DIS = Draft International Standard; IS = International Standard; Mirror Committee = a national committee for inputting to TC265





ISO Standards Development Process

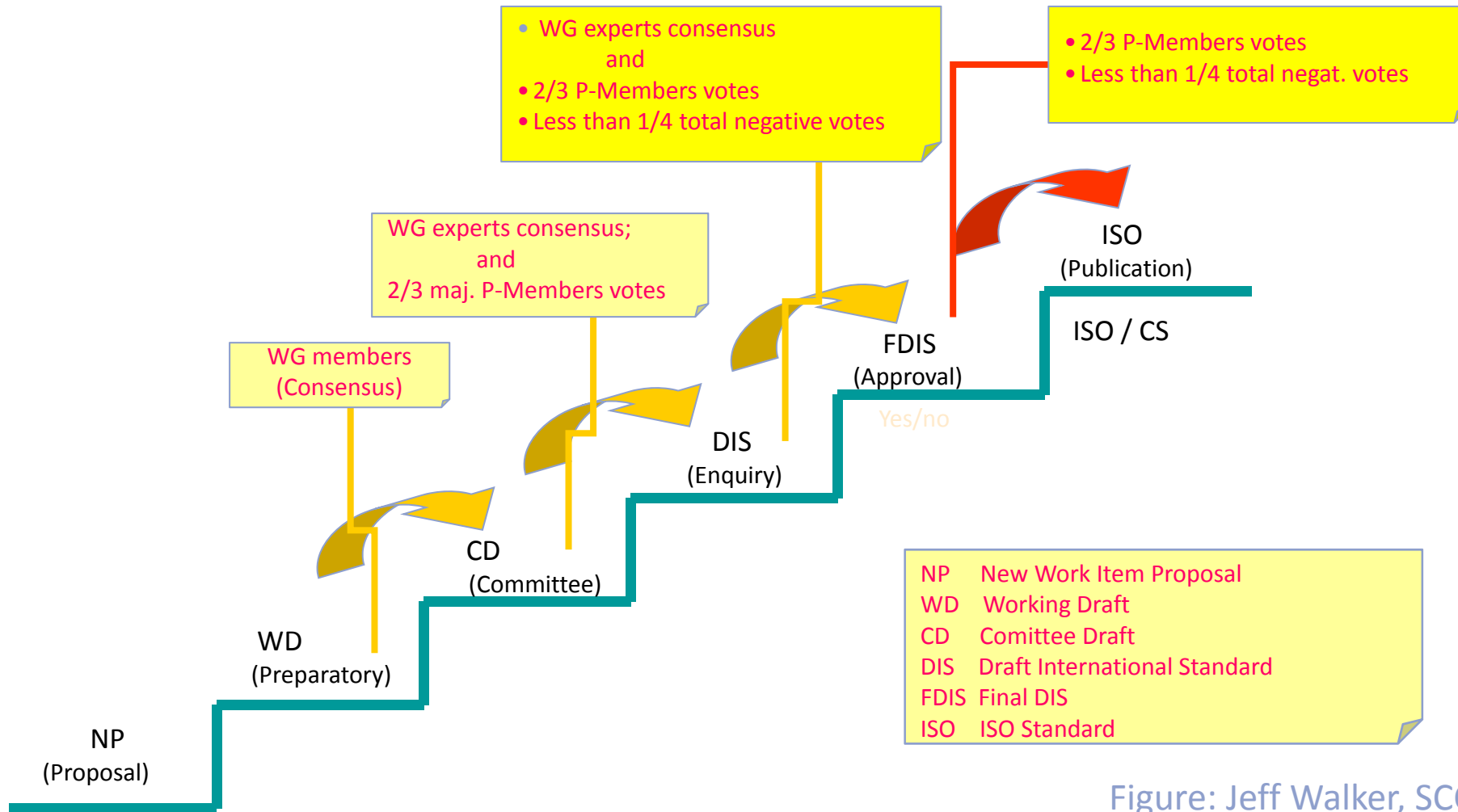


Figure: Jeff Walker, SCC

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, WG 3 Storage, WG 4 Q&V, (WG 5 Cross-cutting)



ISO TC 265 Update



WG 1 Capture

- The Technical Report ISO DTR 27912 is a review of all capture technologies and applications and was published.
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- Work continues towards a standard for Performance Evaluation Methods for Post-Combustion Capture. This will be ISO 27919-1 (ie part 1). A draft (CD) was sent out for voting on 13/09/16 with voting deadline of 08/11/16. **Approved. Comments being worked on. Meeting in London 27 Feb – 1 March.**
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- The topic of part 2 is being decided.



ISO TC 265 Update



WG 2 Transport

- The International Standard (DIS) ISO 27913 “Carbon dioxide capture, transportation and geological storage -- Pipeline transportation Systems” **has been approved with comments and will be published.**
- **The WG decided not to progress onto other transport means and will go dormant.**



ISO TC 265 Update



WG 4 Quantification and Verification

- Objective : GHG emissions performance of whole CCS chain
- Working on a Technical Report first, ISO TR 27915. This DTR was approved for publishing.
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- **A new proposal to develop an International Standard for Quantification and Verification has been sent out for voting in August 2016, deadline for voting is 22/11/16. Approved.**



ISO TC 265 Update



WG 5 Cross Cutting Issues

- Develop IS for Terminology “CCS Vocabulary” – France lead. ISO 19251. Will split the document into 6 parts (one for each WG). Part 1 is cross-cutting and will be progressed by WG5. Parts 2-6 **now won't be done, leave to WGs**
- A CD of ISO 27917-1.2 “Carbon dioxide capture, transportation and geological storage — Vocabulary — Part 1: Cross-cutting terms” was out for voting as a DIS on 02/08/16 with a deadline of 24/10/16. **Approved.**
- Technical Report on Life Cycle Risk Management of Integrated CCS Projects, led by China. A CD has been sent out for voting as a CD DTR on 11/08/16 deadline 03/11/16. **Approved.**
- **New Work Item Proposal for CO₂ Stream Composition. Out for voting 6 Feb 2017. Voting deadline 1 May 2017.**



ISO TC 265 Update



WG6 on Storage using CO2 EOR

- Working towards a draft International Standard. A CD of ISO 27916 was sent out on 17/05/16 with deadline for voting of 17/07/16.
- There were insufficient positive votes (less than 2/3) to proceed to DIS stage so it was turned down and sent back to the WG6 for revision. Also 852 comments.
- **Improved version sent for voting on 8 Feb 2017 deadline 7 April. Approved, with comments. Will move to DIS.**



WG 3 Geological Storage



- **ISO DIS 27914**
- Seed document was CSA Z741 (2012)
- Applicable to DSF and hydrocarbon reservoirs without production
- Recognises site selection and characterisation are unique
- Project Life Cycle : Site screening to Closure. Not post-closure
- Includes offshore (Z741 onshore only)



ISO DIS 27914

Sections



1. Scope
2. Reference Publications
3. Definitions
4. Management Systems
5. Site screening, selection, characterisation
6. Risk Assessment
7. Well Infrastructure
8. Injection Operations
9. Monitoring and Validation
10. Closure



ISO TC 265 Update



WG 3 Storage

- The DIS 27914 has been sent to countries for voting on 21/07/16, deadline 12/10/16. It was approved, with 624 comments. **These are being worked on. The intention is a FDIS by March 2017 for ballot voting in June 2017. No meeting in Karamay.**
- **No thought on further work.**



Future ISO TC 265



Next TC265 Plenary meetings:

- **8-12 May 2017, Karamay, China**
- **13-17 Nov, Sydney, Australia**
- Public information on the work is available at [http://www.iso.org/iso/iso technical committee?commid=648607](http://www.iso.org/iso/iso_technical_committee?commid=648607)





Thank you

Any Questions?