

Drilling Systems Automation

Things you need to know are contained in "DSABOK"

Presenter: John de Wardt

President: DE WARDT AND CO

Program Manager: DSA Roadmap / DSABOK

What is DSABOK

Drilling **S**ystems **A**utomation **B**ody **o**f **K**nowledge

- DSABOK.org is an open web portal to DSA Knowledge

Connected to many
sources

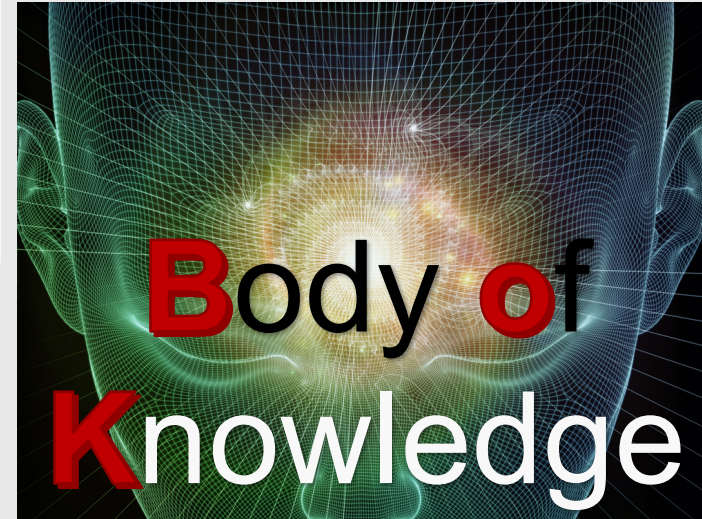
IADC, DSATS, Energetics, OPC
Foundation, ...

Links to DSA Knowledge
information

- Papers, articles, websites

Provides some publishing
capabilities

Alternate to other outlets – not in
competition with or in place of



Today, I will share the following

- DSA-R to DSABOK™ trajectory
- Purpose / steering committee
- Where is it? www.dsabok.org/
- Structure
- Future

* DSABOK™ trademark claimed on behalf of the industry

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- The diagram illustrates the Roadmap Development Process, structured into four main phases with specific activities, participant counts, and a timeline.
- Phase I: Planning and preparation**
 - Activity: Establish Steering Committee; determine scope, boundaries, and implementation approach.
 - Participants: 3 people.
 - Duration: 2 months.
- Phase II: Visioning**
 - Activity: Conduct senior-level vision online collaboration meetings to identify long-term goals and objectives.
 - Participants: ~25 people.
 - Duration: 2 months.
- Phase III: Roadmap development**
 - Activity: Conduct online collaboration meetings to identify and prioritize needed technologies, policies, and time lines.
 - Participants: 50 - 150 people.
 - Duration: 10 months.
- Phase IV: Roadmap implementation and revision**
 - Activity: Conduct expert workshop(s) to reassess priorities and time lines as progress and new trends emerge.
 - Participants: 50 - 150 people.
 - Duration: Recurring (1-5 years).
- Intermediate Steps and Milestones:**
- Stage I:** Develop roadmap document, launch strategy, and tracking systems. (Occurs between Roadmap development and Roadmap implementation and revision).
 - Stage II:** Conduct review and consultation cycles with key stakeholders; refine roadmap. (Occurs during Roadmap implementation and revision).
 - JIP 1 (Joint Implementation Plan 1):** A milestone occurring during the Roadmap development phase.
 - JIP 2 (Joint Implementation Plan 2):** A milestone occurring during the Roadmap implementation and revision phase.
- Overall Timeline:**
- Phase I:** 2 months.
 - Phase II:** 2 months.
 - Phase III:** 10 months.
 - Phase IV:** Recurring (1-5 years).
 - Total Duration for Phases I-III:** 24 months – all volunteer.
 - Total Duration for Phases I-IV:** 14 months total (for Phases I-III) plus recurring cycles for Phase IV.



DSA - R to DSABOK™ spin out

Feedback was DSA-R contained knowledge and roadmap



STEP 1:

Created
www.dsabok.org
alongside
www.dsaroadmap.org



STEP 2:

Intend to split DSA-R
report when publicly
released:
DSA-Knowledge *plus*
DSA-Roadmap



STEP 3:

Maintain both
DSABOK and DSA-R
for their own
purposes

Funding of DSABOK

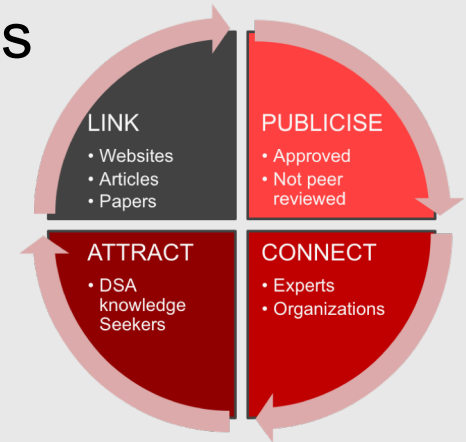
Launched from DSA Roadmap

- Initial funding drawn from DSA – R JIP Funds
 - Cost \$5,050 (excludes hosting)
- Ongoing cost estimated at +/- \$1,500 / month
- Seeking page sponsors (sponsor recognition on a page)
 - To build a strong foundation for longevity
 - Contact john@dewardt.com or info@dsabok.org

DSABOK Purpose

A one stop gateway to Drilling Systems Automation knowledge

- Links to recognized sources of approved information
 - Publications / articles / websites
- Enable open publication for some organizations
 - Articles approved by DSABOK steering committee
 - Not peer reviewed
- Attract knowledge seekers to find solutions
 - Connect with the right experts / organizations



DSABOK Steering Committee

Industry experts approve content / direct structure

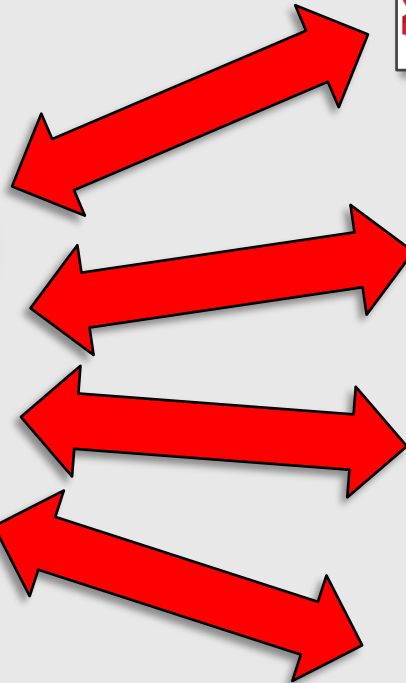
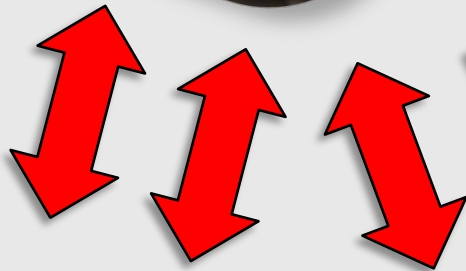
- John de Wardt - DE WARDT AND CO / Program Manager
- Mark Anderson – Shell [DSATS] / Drilling Mechanics
- Amanda DiFiore – Charles River Analytics / HSI
- Moray Laing – Halliburton [DSATS] / Comms
- Robin Macmillan – NOV [ART] / OEM
- Ross Philo – Energistics / Data Standards
- Linda Hsieh – IADC DC / Publications

DSABOK is at www.dsabok.org

On a shared business server for cost / convenience

DSABOK website structure and affiliations

- Industry Portal



ART

DC



Drilling Systems
Automation Technical Section



DSABOK Structure

A quick tour

- [Home Page](#)
- [Charter](#)
- [Affiliates](#)
- [Media](#)
- [Papers](#)
- [Publications](#)
- [Sources](#)



Drilling Systems Automation Body of Knowledge (DSABOK™) is a website devoted to [advising](#), [informing](#) and [publishing](#) information on Drilling Systems Automation (DSA) either directly or though linking to other well established websites.

This website is managed by the DSABOK Program Manager (John de Wardt). All of the content is approved by the [DSABOK Steering Committee](#). The DSABOK Steering Committee acts in accordance with the [DSABOK Charter](#).

The information is organized under navigation tabs by source, type of publication and new material.

DSABOK™ is a trademark of the dsabok.org website

Affiliates

This DSABOK website is affiliated with well established organizations that have roles in the development and publication of DSA knowledge.





Charter for DSABOK.org

Official Designation

The Drilling Systems Automation Body of Knowledge (DSABOK™) is hereby established as an independent organization run by a Program Manager and supported by volunteers. This organization has no official registration or designation. The DSABOK™ content is steered by a volunteer [Steering Committee](#).

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Affiliates – connecting to their websites

These organizations have information publishing capabilities. In each case, we provide a description of the purpose of the affiliate relevant to DSABOK together with a link to their publishing site. As far as possible these links are publicly accessible links; unfortunately in some circumstances a particular organization may require a login to access their publications.

Links in this section



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Media

Media is a compilation of recommended links to other approved websites where articles, presentations, videos and other information are published.

Affiliated media publication websites can be directly linked from:

[SPE DSATS](#) & [SPE JPT](#) & [SPE JPT Technology](#)

[IADC Drilling Contractor](#) & [IADC Drilling Contractor Automation](#) & [IADC ART](#)

Energistics [WITSML Standards](#),

Section includes: [Articles](#), [Presentations](#) and [Videos](#)

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Papers

This section provides links to recommended papers published by various competent organizations, these include both technical papers and peer reviewed papers.

Highly Recommended Reading

This list is our most recent recommended reading for DSA interest. Download and review. [DSABOK Papers Listing](#)

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Publications – Not Peer Reviewed

This is a section dedicated to releases of presentations, publications and white papers released solely through this website under the [charter](#) of the website that are first releases not peer reviewed. They are provided as new information for user review as use as users see fit.

What's New

Latest publications released through DSABOK solely are listed below.

Sub-Headings

[Systems](#)

[IMS \[Instrument Management Systems\] / Communications](#)

[Models / Simulations](#)

[HSI \[Human Systems Integration\] / HF \[Human Factors\]](#)

[Equipment](#)

[Standards](#)

[Interoperability](#)

System of Systems / Systems of Interest

D & C Framework

Qualities and requirements for sensors

Levels of Automation Taxonomy [LOAT]

Comprehensive list of existing standards – IEEE, ISA,

DSA
Roadmap
content to be
released here
– Early 2018
(target)



Archive for the 'Sources' Category:

Nabors

Nabors has embarked on a three tier Drilling Automation Strategy: Advisory Automation, Process Automation and Machine Automation. Advisory Automation integrates customers' well programs and best practices with Nabors' rig activities. Process Automation integrates service company activities with the Nabors control system to optimize the drilling process. These processes include wellbore placement, geosteering, down-linking to downhole tools, managed pressure drilling, and casing running. [Nabors system.](#)

Contact: Scott.Boone@nabors.com

Posted on [August 19, 2018](#) [C. Sources](#)

NOV

NOV has developed an automated drilling system as a new product line. This system utilizes a reflexive system over the rig controls to apply various automated procedures for drilling operations. The system permits the implementation of applications for drilling process control developed by clients and third parties. The system also has the capability to integrate with real time downhole data transmitted to surface by wired drill pipe. [NOV system.](#)

Contact: Nicholas.Morriss@nov.com

Posted on [May 16, 2018](#) [C. Sources](#)

Open for other companies to provide their capabilities – short, to the point, limit commerciality - contact

DSABOK is a one stop gateway to DSA Knowledge



Thanks to presentation co-authors

Mark Anderson - Shell

Moray Laing - Halliburton

John Macpherson - BHGE

We welcome new funders

Create a presence in Drilling Systems Automation

Contact : john@dewardt.com

Or info@dsabok.org



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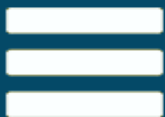
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Operating Guidelines

The DSABOK website is governed by a Steering Committee who operate on a majority vote. The main functions of this Steering Committee are to:

1. Review and approve the DSABOK™ website structure
2. Review and approve new affiliations to the DSABOK™
3. Review and approve publications on the DSABOK™ website
4. Steer and guide the overall content and linkages on the DSABOK™ website particularly with regard to equality of opportunity to share information

Membership and Organization

The Program Manager is the President of DE WARDT AND COMPANY, John de Wardt (2018 –) until superseded either through resignation or unanimous vote by the Steering Committee to terminate this position. The Steering Committee will be composed of respected industry leaders with a track record of accomplishing and completing tasks involving contributors from different companies and backgrounds. The Steering Committee shall be comprised of experts representing the various segments that are active in

DSA as well as each Affiliate to the DSABOK.

The initial Steering Committee was formed by the Program Manager from representatives on the DSA-R Steering Committee. The Steering Committee will decide by majority vote new additions to the Steering Committee as well as terminations of positions on the Steering Committee.

Funding

The DSABOK is a spin off from the DSA Roadmap Industry initiative (DSA-R). The DSA-R became an IADC DEC approved JIP for both round 1 and round 2 funding. The DSA-R JIP funds and DE WARDT AND COMPANY funds paid for the launch of this DSABOK™. The DASBOK™ will continue to seek funding to cover web hosting, web developer support, Program Manager to manage the program including posting content on the website and any other associated costs with maintaining a high calibre website.

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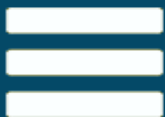


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