The first Data Exchange Session took place on Wednesday 28 April 2021 with 41 attendees.

The presenter, Nick Kropp, has been involved with data links for over 30 years, beginning as a surveillance technician aboard the E-3 AWACS and later with Link 16 and tactical data link operations and implementations throughout his career. Nick is also the Chair of the IDLSoc Technical Committee.

To begin with Nick explained a little bit about the thinking behind The Data Exchange Sessions and then went on to give an interesting and informative presentation on Tactical Data Links (TDLs), their history, current initiatives and future possibilities.

He covered the TDLs featured in the Quick Guide including Link-11 A/B, Link-22, Link 16 (including IJMS, JTIDS, MIDS, JTRS), JREAP (including ABC), SADL, VMF and Interoperability, and provided an overview of each of the TDLs. Along with each of these he provided a snippet of random information, for example, after discussing JREAP Nick informed us with the fact that riding Roller Coasters could help you pass a kidney stone!

Nick then looked at some current initiatives including the upcoming Link 16 Block Upgrade 2 (BU2), JTRS Migration, the Advanced Battle Management System (ABMS), Joint All Domain Command and Control (JADC2), Advanced Tactical Data Link (ATDL) and the SATCOM Expansion.

He then moved on to upcoming technologies, such as Artificial Intelligence (AI), Global Mesh Architecture and Free Space Optical Communications that will go on to impact TDLs in the future.

Nick will explore the topic of AI and Machine learning in an upcoming Data Exchange Session in June (details provided below).

Lastly, Nick discussed Sunset, systems that are going to be put into mothballs, and the difficulties of shutting down a system after so much has been invested into it and some of the key decision points that go into making the choice in why the system should be killed.

The session ended with some questions from the attendees including queries about dealing with Data overflow, the inevitability of TDL becoming separate from the Transport Medium and putting Link 16 on LEO. There were also some suggestions for future Data Exchange Sessions.

There were two polls that were put up during the session and they were “What is the future of Datalinks” and “How long will Link 16 will be out there” and the results are presented below.

We would like to thank Nick, and all the attendees, for making the first Data Exchange Session a success, and we look forward to the upcoming events.

This session was recorded and will be made available at a later date.
Upcoming Data Exchange Sessions

May

Virtual Demo - Jaime King

On behalf of the Technical Committee, welcome. This year, once again, we have the opportunity to expand on what the expectations are hoped to be gained from the international demonstration. As a start to our planning, we are using one of the Data Exchange sessions, which are open to all members, to hear what you would like the demonstrations to show. It will be your chance to shape this year’s demonstration and help both the Technical Committee, and the vendors, develop a really useful demonstration.

Bearing in mind that we are facing emerging military threats, unstable regimes and the cyber warfare tactics of non-allied nations we can make communication pathways our main focus.

This year's demonstration will give participants the opportunity to push boundaries of what is expected. Each vendor will be given one (or more) time slots to showcase capabilities in Link 16, Link 22, COT, JREAP, Cyber, VMF, and other communication means. We will begin coordination for the demonstration in May, and we look forward to your participation.

Booking available through the Events Page.
18 May 2021

June

The Future of Artificial Intelligence and Machine Learning in the TDL Industry - Introductory Session - Nick Kropp and Patrick Pierson

Booking available through the Events Page.
2 June 2021

July

CESMO - Mr Marco Mehling (retired LtCol DEU AF)

CESMO is an interoperability method and protocol which uses IP (Internet Protocol) messaging transmitted using existing air-to-air and air-to-ground/ground-to-air communications. CEMOS provides a real-time depiction of the location of hostile ground-based air surveillance and fire-control or ground-controlled interception radars during air operations.

The ability to determine the exact location of hostile radars in real time, and to share that information with other platforms, is crucial.

One of the clever aspects of CEMOS is that it is not needed to devise a new datalink or communications network to share this information. Any already existing link which can handle IP data can handle CEMOS traffic.

The key contribution CEMOS can make, particularly for the air battle, is providing real-time details of hostile emitters active in the theatre of operations.

Booking available through the Events Page.
14 July 2021

If there is a topic you would like to see covered in these sessions please contact events@idlsocweb.org

How to attend a Data Exchange Session

- Register via the Events Calendar on Idlsocweb.org. Please do not leave this until the day of the meeting.
- Prior to the meeting, normally two days before, you will receive an email from the Society asking you to register on Zoom for the meeting.
- Once you have completed the 2nd registration you will sent a link to the actual meeting.
- You will be muted when you enter the meeting, please remain on mute, unless you wish to enter the debate.
Last year we had to cancel IDLS2020 due to the pandemic, something we had hoped to avoid and then in a 12 week period work out how to put on a virtual event, create the programme and ensure all the chairs and speakers were comfortable with the technology.

Though the situation is now more positive with vaccine roll outs taking place around the world, there are still many unknowns so we have taken the decision to hold this year’s annual event online too. The differences this time are that we learned so much from last year and we have more time to plan. The aim is to build on what we learned and offer members and sponsors more. Some of the developments are:

### The Training Day

This will take place on Monday 1 November, but the Trainers are looking to offer longer courses, either 4 hour sessions or full day sessions. This means attendees may be joining just one or two training sessions during the day, but will get a more in depth course.

We will be looking to publish the list of training courses in the next edition of the newsletter.

### The Main Programme

Like last year the plan is to run the online sessions in 2 hour blocks with a mixture of speakers, demonstrations and panel sessions.

It will run from Tuesday to Friday.

Presentations will be 30 minutes long with a 15 minute Q&A

Demonstrations will be 10 minutes long with a 5 minute Q&A

Panel session could be of one or 2 hours long depending on the topic and the number of panelists.

The Events and Technical Committees are talking with the Chapters to see if any of them would like to lead a 2 hour session and bring in speakers from their region.

In addition, some of the Data Exchange sessions taking place between now and IDLS2021 Online, will be lead-ins to symposium sessions.

### Networking Sessions

We are planning on introducing some networking sessions, where attendees can join speakers/sponsors/members of the committees in breakouts and debate hot topics or just catch up.

These networking sessions will have varied timeslots with the aim of making them accessible across all time zones.

### Sponsors Area

We are looking to develop the sponsors’ area of the online environment, so it is easier for you to contact experts and get the information required.

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<table>
<thead>
<tr>
<th>GMT</th>
<th>1 November</th>
<th>2 November</th>
<th>3 November</th>
<th>4 November</th>
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<td>2hrs of Presentations, Demonstrations &amp; Panels</td>
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**IDLS2021 Online Sponsorship**

**IDL2021 Virtual Event Benefits**

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<tr>
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<th>Silver</th>
<th>Bronze</th>
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<tr>
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<tr>
<td>Recognition on Social Media</td>
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<tr>
<td>25-minute marketing slots either prior to or post the event, promoted directly to our members.</td>
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<td>3</td>
<td>2</td>
<td>1</td>
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<tr>
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<td>Up to 3</td>
<td>Up to 2</td>
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All corporate members are entitled to a 20% discount on the prices shown above. All prices shown above exclude VAT.

**New features available in this year’s sponsorship packages are:**

**The 25 minute marketing slot**

The 25 minute marketing slot is available either prior to or post the IDLS2021 event.

This year, as discussed on the previous page, the Society is putting together a series of one hour sessions set to take place in different time zones for our members.

- You can choose your time zone
- You can choose your topic
- We will market the event to our members
- If the event is recorded, we will add the recording to your sponsorship area on the website

**Links to your website or virtual stand**

Many companies have invested in virtual stands which are accessed from a URL. If you have a virtual stand, we will be happy to link to that stand and highlight the fact its there. Alternatively, we can include a link to your website.

**When does our information appear?**

The sponsor showcase area of the IDLS2021 website will go live shortly after we have confirmed the sponsors, and they supply us with content.

Members will be advised via the newsletter of updates to the site and sponsors.

If you are interested being a sponsor at IDLS2021 please email events@idlsocweb.org.
We would like to thank Leidos for being a sponsor for IDLS2021.

Leidos is a highly competitive, solutions-based organisation providing practical answers for a complicated world.

Through a culture of innovation and history of performance they have developed deep customer trust built on integrity and create enduring solutions that improve our world. The offer technology, services and IT solutions to military operations, defence organisations and government ministries to deliver situational awareness and enhance operating effectiveness of mission critical communication systems.

There Tactical Data Link toolset provide through-life interoperability and support. Providing technical solutions to address your needs, assisting with the definition and capturing of requirements, support during acquisition and integrations, simulating multi-TDL environments and provides the capability to perform detailed and complex data analysis.

We would like to thank the following companies who have already signed up to exhibit at IDLS2021.

Silver

Bronze
Data Download is a new, ongoing feature where we put the same set of six questions to the movers and the shakers in the Data Links field. 

The first subject is IDLSoc Chairmen LtCol Volker Schaaf who has been Chairman for IDLSoc since 2014.

“The right data, at the right time, with the right user”

LtCol Volker Schaaf

Please Introduce yourself?

I am Volker Schaaf, active military, working as a Branch Head (LtCol) at the German Air Force Headquarters in Berlin. One of my responsibilities is to cover the operational TDL requirements of the platforms and systems of the German Air Force.

What led you into working with Data Links?

My military career led me into working with data links. After my time at the university I started my training as an EW officer in a German Control and Reporting Centre (CRC), followed by time in track production, fighter control and battle management.

Later on I was involved in the capability management and further development in the area of Tactical Data Links and Software Defined Radio.

What was your first experience of a Data Link?

It happened in 1993. Link 1 was my first experience in this interesting world. It was like a magic thing I’d never heard of before.

In the years following there was IJMS, 11 and 16 through to today with VMF, JREAP and Link 22.

28 years ago I never expected that data links would influence my life, but they did, and I am very pleased it did.

What is it about Data Links that you find so compelling?

The way it works!

Today’s data links are so complex, the hardware and software is amazing, but if you spend the time to understand it and work with it everyday, it becomes quite easy to use.

What are the challenges facing Data Links today?

The right data, at the right time, with the right user.

That’s easier said than done. Ultimately, they have to be safe and reliable because at the end of the day they are of enormous importance to the lives of soldiers.

What advice would you give to someone entering the Data Links Field

Data Links are not a mystery. Data Links are not typical IT. Data Links are an integral part of the operational environment.

They change the way you use language. They introduce you to extremely interesting personalities.

So, my advice is: “deal with it”.

Get in contact with the community. Ask them if you want to know something. The community is like a big family.
**Corporate News**

**Northrop Grumman Australia and Boeing join forces for JP9347**

Boeing Defence Australia (BDA) and Northrop Grumman Australia have partnered to develop a solution for the Joint Interface Control System, the first capability element of JP9347 – the Commonwealth of Australia's Joint Data Network Program.

Using the Joint Interface Control system, defence operators will be able to integrate data coming in from multiple and independent secure networks to create a single operational view for improved situational awareness.

The companies’ solution will integrate proven products from both partners to create a sovereign and uniquely Australian system that will evolve to meet the ever-increasing data and coordination needs of the Australian Defence Force.

“The team offers operationally proven, mission capable communication and Tactical Data Link products,” says Boeing Defense, Space and Security’s director of Global Sales & Marketing for Australia and New Zealand, Dale McDowall. “Combined with extensive in-country systems design and development experience to deliver the foundation for a resilient and sovereign-controlled JDN”.

From the state-of-the-art battlespace management capability system, Wakulda, to the deployable, multi-bearer Currawong battlespace communication system, BDA has a demonstrated pedigree for in-country development and delivery of both hardware and software solutions for complex, sovereign communications networks.

For 60 years, Northrop Grumman has been a leader in the design, development and delivery of end-to-end communications and advanced networking capabilities for U.S. and allied military forces. Northrop Grumman Australia is building on the company's proven track record of success by delivering Combined Joint All-Domain Command and Control offerings and leading sovereign communications and network management technologies.

“This partnership brings to bear the best of companies’ technology, talent and expertise in network communications and gateway systems to ensure the ADF maintains the required strategic advantage in an age of data-driven warfare,” said Andrew Pryor, director of business development, Northrop Grumman Australia. “We stand ready to meet the JP9347 mission needs of the ADF today and in the future.”

The team will help grow Australian industry capability through technology transfer while providing reach back to global resources to help Australia remain at the cutting edge of data link developments.

**Double Dutch Success for Thales**

Thales has been selected by Netherlands Defence Material Organisation (DMO) to deliver the Tactical Data Link Management System (TDL MS) for both Static and Mobile applications for the Royal Netherlands Air Force.

Following the successful down select of Thales to deliver the national TDL MS for the Royal Netherlands Air Force (RNLAF), Thales is delighted to deliver a combined Network Management System (NMS) / Joint Range Extension (JRE) hardware and software capability across the Netherlands. The key NMS/JRE Control Site capability will be located at Air Operations Control Station Nieuw Milligen, supporting an intelligent digital infrastructure encompassing MIDS radios and ancillary equipment across a number of remote site locations in The Netherlands.

In addition to supporting the RNLAF TDL static infrastructure at the Air Operations Control Station, Thales will deliver an equivalent system to be integrated in their vehicle based transportable capability that will enable the National Datalink Management Cell to deploy on Operations away from the Air Operations Control Station. The delivery of the program will comprise of Thales teams working out of Huizen, The Netherlands providing the key in-country support and Templecombe, UK providing the vital TDL MS knowledge as System Design Authority.

Despite the challenge of COVID 19 restrictions over the last year Thales was able to work closely with the DMO and RNLAF in meeting their requirements for this important programme.

Once operational the static and transportable TDL MS will provide the NDMC with the NMS capability to dynamically manage, monitor and analyse multiple Link 16 networks and the intelligent digital infrastructure, supported by the JRE solution. This will enable the forwarding and receipt of multi-link operational data within National and Allied areas of responsibility from other agencies and TDL platforms that are operating beyond line of site providing world-class, operationally proven technology from a Centre of Excellence for TDL in the UK at Templecombe.

The Netherlands “We like the ways of working, responsiveness and ease of interaction and of course most important to continue working on the same platform and re-using their build up knowledge, skills and training material. It is important we have the simulation system for training; it will allow us to train new colleagues much faster and easier, and not having to rely on the operational system.”
There are many benefits to becoming a member of the International Data Links Society, and any data link user, customer, manager, policy maker, technical adviser, support agent or supplier are eligible for membership with the Society.

Benefits include:

- Access to the only dedicated network for Data Links professionals providing a great opportunity to connect with others across the wider Data Links community.
- Access to hundreds of Data Links related documents and files.
- The opportunity to attend Chapter events, and to get priority booking at IDLSoc events.
- Every year IDLSoc holds a Symposium, and as a member you get a special discounted fee for attendance.

The current individual one year subscription fee is US$75.00 and you can apply online.

Society staff will vet your application for eligibility and once approved, you will be sent an ID to login to the website and pay for your membership.

IDLSoc Newsletter - Content Request

We are looking at publishing more technical articles in the IDLSoc newsletter.

There is a rich seam of topics within the data links field that we have not yet covered and would make for interesting and enlightening articles.

We would be interested in articles of around 500 to 1500 words and based on current issues of interest, including relevant aspects of research, practice and application.

The IDLSoc newsletter readership includes industry, government, academia and individuals within the data links community, so please bear this in mind when submitting your proposal.

If you have a topic you would to submit, please email your proposal to editor@idlsocweb.org.

IDLS2022 Save the date

We are pleased to confirm that IDLS2022 will be taking place in Halifax, Nova Scotia from 6-10 November 2022.

Corporate Membership

We would like to thank Combitech, DLS and Meta Mission Data for renewing their Society corporate memberships. For more information about becoming a Corporate Member of IDLSoc please click here.