

Tactical Data Links Comparison Table

	NATO Link 1	Link 11A	Link 11B	JTIDS/MIDS Link 16	MIDS BU2/JTRS Link 16	Link 22	VMF
Codename	-	Alligator	Zipcode	Timber	Timber	Elfin	-
Message Type	S-Series	M-Series	M-Series	J-Series	J-Series	F-Series FJ-Series	K-Series
Media	Landline & Microwave	High Frequency (HF) & Ultra High Frequency (UHF)	Landline, Microwave, Radio, Troposcatter	UHF	UHF	HF (Fixed Freq.) UHF (Fixed Freq. and/or Freq. Hopping)	UHF, VHF, HF, Satellite Communication (SATCOM), Microwave, any other as required
Throughput	1200 or 2400bps	1090bps (1364 with EDAC) 1800bps (2250 with EDAC)	Standard 1200bps. 600, 2400, 4800 and 9600bps also available	STD - 26,880 Packed-2 – 6 words; 53,760bps Packed-4 – 12 words; 107,052bps	Formatted Code Network Rates: STD – 3 words; 26,880bps Packed-2 – 6 words; 53,760bps Packed-4 – 12 words; 107,052bps ET 0 – 40 words; 358,400bps ET 1 – 61 words; 546,560bps ET 2 – 93 words; 833,280bps ET 3 – 108 words; 967,680bps ET 4 – 123 words; 1,102,080bps	HF Fixed Freq. 640 - 9600bps UHF Fixed Freq. 12,666bps	Determined by bearer
Network Access	Point to Point only	Usually Rollcall (Other methods available)	Point to Point only. Time division	Time Division Multiple Access (TDMA)	TDMA	TDMA (Fixed or Dynamic)	Carrier Sense Multiple Access (CSMA) for systems utilising MIL-STD-188-220
ECM Resistance	X	X	X	✓	✓	✓ (Only when Freq. Hopping Radio used)	✓ (Only when Freq. Hopping Radio used)
Encrypted	X	✓	✓	✓	✓	✓	✓

	NATO Link 1	Link 11A	Link 11B	JTIDS/MIDS Link 16	MIDS BU2/JTRS Link 16	Link 22	VMF
Major Functions	Air Picture compilation only Strobe data	Picture Compilation Electronic Warfare (EW) Limited Command & Control (C2) Free Text	Picture Compilation EW Limited C2 Free Text	Picture Compilation EW Weapons Coordination & Control Imagery Space Voice and Free Text	Picture Compilation EW Weapons Coordination & Control Imagery Space Voice and Free Text	Picture Compilation EW C2 Free Text Space	Ground Warfare Fire Control CAS Manoeuvre Imagery Free Text
Track Quality	0 – 7	0 – 7	0 – 7	0 – 15	0 – 15	0 – 15	Non defined
Play 'area'	512nm x 512nm	512nm x 512nm	512nm x 512nm	Worldwide (WGS 84)	Worldwide (WGS 84)	Worldwide (WGS 84)	
Positional Granularity	750 Feet	1500 Feet	1500 Feet	32 Feet	32 Feet	32 Feet	Message Dependent
Air Speed Granularity		28dm/h	28dm/h	2dm/h	2dm/h	2dm/h	Message Dependent
Documents	NATO Technical & Message: Allied Tactical Data Link Publication (ATDLP)-5.01	US Technical: MIL-STD-188-203 US Message: MIL-STD-6011 NATO Technical & Message: ATDLP-5.11	US Technical: MIL-STD-188-212 US Message: MIL-STD-6011 NATO Technical & Message: ATDLP-5.11	US Technical & Message: MIL-STD-6016 NATO Technical & Message: ATDLP-5.16 Terminal: ATDLP-1.75	US Technical & Message: MIL-STD-6016 NATO Technical & Message: ATDLP-5.16 Terminal: ATDLP-1.75	NATO Technical & Message: ATDLP-5.22	US Message: MIL-STD-6017 NATO Message: STANAG 5519 US Header: MIL-STD-2045-47001 US CNR: MIL-STD-188-220
Examples of Users	NATO Air Command & Control System (ACCS) NATO Combined Air Operatons Centre (CAOC) NATO CRC PFP CRC	NATO Navies and Air Forces Australia UAE Brazil Many others	NATO Ground units Some NATO SSSB sites Other Ground based units	NATO Navies, Air Forces, Ground units Australia S Korea Pakistan Approx. 43 Nations	NATO Navies, Air Forces, Ground units Australia S Korea Pakistan Approx. 43 Nations	Naval Forces from Germany Spain Finland Netherlands Italy Other Nations' Navies	United States United Kingdom Australia Canada Germany Netherlands Other Nations

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