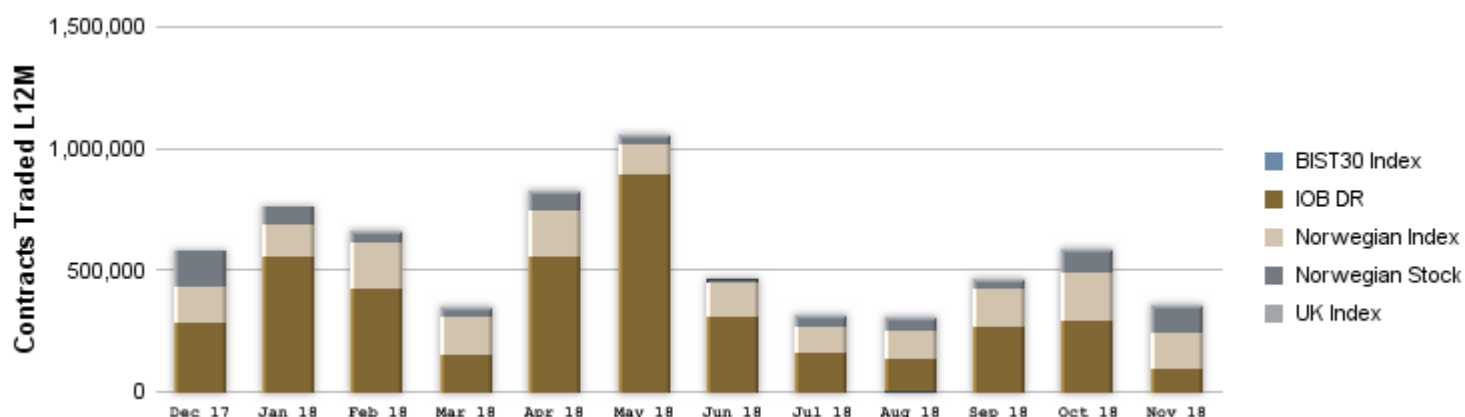


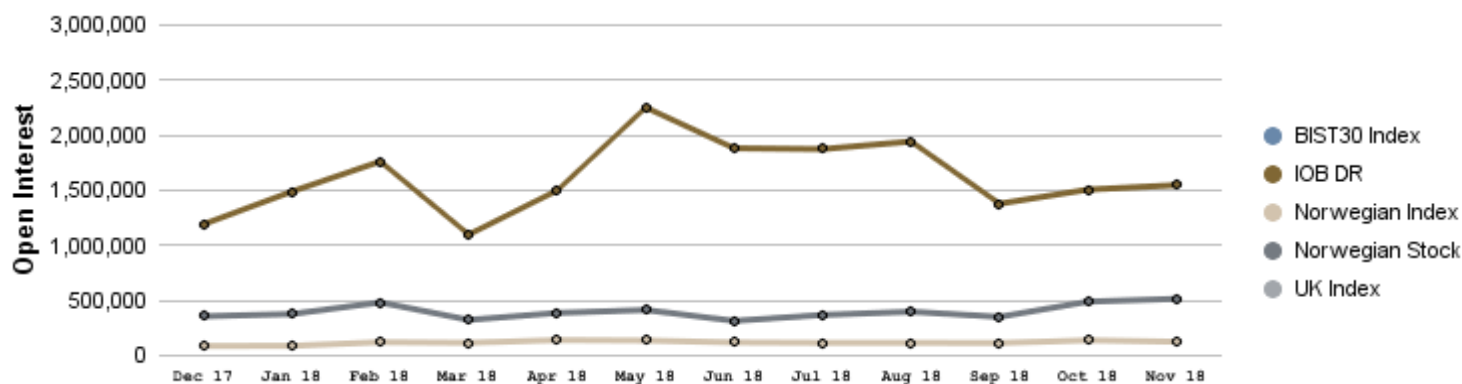
## Activity Summary - By Product Category

Product Category	November 2018		2018 YTD		2017 YTD		Open Interest as at 30 Nov 2018
	Volume	Notional (\$m)	Volume	Notional (\$m)	Volume	Notional (\$m)	
IOB DR Futures	14,048	\$17.7	759,929	\$963.1	674,885	\$697.5	217,121
	-86%	-76%	+13%	+38%			
Norwegian Index Futures	128,654	\$1,335.8	1,399,368	\$14,298.6	1,221,174	\$9,776.3	40,633
	-17%	-20%	+15%	+46%			
BIST30 Index Futures			40	\$0.1	84	\$0.3	
			-52%	-61%			
Norwegian Stock Futures					116,010	\$14.2	68,357
Total Futures	142,702	\$1,353.5	2,159,337	\$15,261.9	2,012,152.5	\$10,488.3	326,111
	-45%	-22%	+7%	+46%			
IOB DR Options	72,649	\$130.5	3,034,454	\$4,390.5	2,605,906	\$3,104.2	1,330,322
	-60%	-31%	+16%	+41%			
Norwegian Stock Options	114,690	\$186.3	672,940	\$1,263.4	1,077,138	\$1,404.5	446,859
	+17%	+11%	-38%	-10%			
Norwegian Index Options	21,468	\$222.2	258,725	\$2,579.7	244,928	\$1,929.1	85,147
	-51%	-52%	+6%	+34%			
BIST30 Index Options					6	\$0.0	
UK Index Options				\$0.0	167	\$15.5	
Total Options	208,807	\$539.1	3,966,119	\$8,233.6	3,928,145	\$6,453.2	1,862,328
	-36%	-34%	+1%	+28%			
Total Derivatives	351,509	\$1,892.6	6,125,456	\$23,495.5	5,940,298	\$16,941.5	2,188,439
	-40%	-26%	+3%	+39%			

All statistics include both on & off book trading. The open interest data for Norwegian products includes both LSEDM & Oslo Børs. Percentages reflect changes compared to prior period.

## Volume & Open Interest Evolution: Last 12 Months





## Activity Summary - Top 10 LSEDM Instruments by Notional (\$M)

Issuer Name	November 2018				2018 YTD			
	Volume	% Change (MoM)	Notional (\$m)	% Change (MoM)	Volume	% Changes (YoY)	Notional (\$m)	% Changes (YoY)
NORILSK NICKEL	31,215	-12%	\$61,108,540.00	+1%	606,170	+64%	\$1,054,918,979.14	+76%
PJSC LUKOIL	6,746	+16%	\$48,474,295.00	+17%	206,903	+1%	\$1,361,152,524.16	+26%
SUBSEA	34,928	+163%	\$42,327,759.45	+158%	60,851	+56%	\$78,688,192.40	+43%
YARA INTL	8,311	-39%	\$38,185,984.83	-41%	83,719	+43%	\$391,857,535.36	+63%
EQUINOR	9,403	+60%	\$24,774,793.04	+45%	82,614	-47%	\$214,438,493.06	-24%
ROSNEFT OIL CO	30,600	-67%	\$19,329,240.00	-71%	615,403	+74%	\$381,081,597.64	+87%
STOREBRAND	17,329	-43%	\$16,046,509.08	-44%	71,398	-35%	\$65,793,914.08	-16%
DNB ASA	5,751	+59%	\$11,272,787.84	+59%	29,153	-62%	\$57,935,896.97	-58%
TELENOR ASA	4,715	+250%	\$10,031,061.87	+273%	26,016	-54%	\$58,520,699.25	-41%
BAKKAFROST	1,531	+322%	\$8,778,082.47	+273%	5,755	+62%	\$32,790,054.73	+145%

All statistics include both on & off book trading. 'MoM' stands for Month-on-month and 'YoY' stands for Year-on-year

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 30 Nov 2018
			Nov 18	Oct 18	% Change	Nov 18	Oct 18	% Change	
AKERBP	AKERBP	Futures							1,485
AKERBP	AKERBP	Options	1,677	880	+91%	\$5,616,945	\$3,505,980	+60%	9,786
AKER SOLUTIONS	AKSO	Futures							800
AKER SOLUTIONS	AKSO	Options	5,677	2,783	+104%	\$3,492,887	\$1,926,699	+81%	6,873
BAKKAFROST	BAKKA	Options	1,531	363	+322%	\$8,778,082	\$2,355,709	+273%	3,182
DNB ASA	DNB	Futures							460
DNB ASA	DNB	Options	5,751	3,610	+59%	\$11,272,788	\$7,082,786	+59%	12,729
DNO INTL	DNO	Futures							6,670
DNO INTL	DNO	Options	1,235	1,548	-20%	\$237,921	\$241,879	-2%	41,385
EQUINOR	EQNR	Futures							3,085
EQUINOR	EQNR	Options	9,403	5,870	+60%	\$24,774,793	\$17,057,697	+45%	69,450
FRONTLINE	FRO	Futures							2,000
FRONTLINE	FRO	Options	2,031	977	+108%	\$1,451,740	\$611,950	+137%	6,840
GAZPROM	OGZD	Futures		57,096			\$28,719,595		134,148
GAZPROM	OGZD	Options	11,938	64,197	-81%	\$6,132,160	\$31,809,750	-81%	474,179
GJENSIDIGE F	GJF	Futures							916
GJENSIDIGE F	GJF	Options	565	268	+111%	\$974,760	\$435,238	+124%	4,170
JSC VTB BANK	VTBR	Options		23,000			\$2,990,000		37,500
MAIL.RU GROUP	MAIL	Options							600
MARINE HARVEST	MHG	Options	1,687	2,374	-29%	\$4,340,184	\$5,915,887	-27%	10,859
NORDIC SEMICON	NOD	Futures							1,643
NORDIC SEMICON	NOD	Options	789	851	-7%	\$419,618	\$466,301	-10%	30,929

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 30 Nov 2018
			Nov 18	Oct 18	% Change	Nov 18	Oct 18	% Change	
NORILSK NICKEL	MNOD	Futures	5,347	5,213	+3%	\$10,225,340	\$8,862,625	+15%	6,716
NORILSK NICKEL	MNOD	Options	25,868	30,207	-14%	\$50,883,200	\$51,821,900	-2%	148,924
NORSK HYDRO	NHY	Futures							15,220
NORSK HYDRO	NHY	Options	13,341	16,206	-18%	\$6,993,679	\$8,524,185	-18%	107,761
NORWEGIAN AIR	NAS	Futures							1,700
NORWEGIAN AIR	NAS	Options	1,646	705	+133%	\$5,280,602	\$1,998,384	+164%	10,096
NORWEGIAN FIN	NOFI	Futures							462
NORWEGIAN FIN	NOFI	Options	530	467	+14%	\$471,850	\$543,754	-13%	2,040
OA0 NOVATEK	NVTK	Options	350	550	-36%	\$5,575,000	\$9,225,000	-40%	1,450
OBX INDEX	OBX	Futures	128,654	154,861	-17%	\$1,335,783,621	\$1,660,066,456	-20%	40,633
OBX INDEX	OBX	Options	21,468	44,151	-51%	\$222,210,549	\$465,540,407	-52%	85,147
ORKLA A	ORK	Futures							50
ORKLA A	ORK	Options	295	233	+26%	\$273,763	\$207,279	+32%	886
PAO SEVERSTAL	SVST	Options							150
PETROLEUM GEO	PGS	Futures							3,870
PETROLEUM GEO	PGS	Options	1,880	1,211	+55%	\$441,080	\$491,799	-10%	4,472
PJSC LUKOIL	LKOD	Futures	241	923	-74%	\$1,756,895	\$6,870,075	-74%	12,211
PJSC LUKOIL	LKOD	Options	6,505	4,910	+32%	\$46,717,400	\$34,584,400	+35%	63,872
PJSC MAGNIT	MGNT	Futures							1,588
PJSC MAGNIT	MGNT	Options	187	187	+0%	\$308,200	\$308,200	+0%	4,955
PJSC TATNEFT	ATAD	Options	40	2,000	-98%	\$267,000	\$14,400,000	-98%	110
RENEWABLE ENER	REC	Futures							18,500
RENEWABLE ENER	REC	Options							2,600

## LSEDM Trading Statistics by Underlying

Underlying Issuer Name	Underlying	Instrument Type	Number of Contracts Traded			Notional Traded (\$)			Open Interest as at 30 Nov 2018
			Nov 18	Oct 18	% Change	Nov 18	Oct 18	% Change	
ROSNEFT OIL CO	ROSN	Futures	7,780	40,090	-81%	\$4,924,740	\$29,320,941	-83%	29,727
ROSNEFT OIL CO	ROSN	Options	22,820	52,019	-56%	\$14,404,500	\$36,491,500	-61%	269,217
SAMSUNG ELECTR	SMSN	Options	11	51	-78%	\$109,600	\$509,400	-78%	11
SBERBANK	SBER	Futures	680	709	-4%	\$841,840	\$850,800	-1%	32,731
SBERBANK	SBER	Options	4,930	5,384	-8%	\$6,136,000	\$6,274,200	-2%	327,794
SCHIBSTED A	SCHA	Options	103	248	-59%	\$400,718	\$946,436	-58%	305
STOREBRAND	STB	Futures							9,225
STOREBRAND	STB	Options	17,329	30,613	-43%	\$16,046,509	\$28,595,104	-44%	26,378
SUBSEA	SUBC	Futures							885
SUBSEA	SUBC	Options	34,928	13,276	+163%	\$42,327,759	\$16,425,128	+158%	37,037
SURGUTNEFTEGAZ	SGGD	Options							500
TELENOR ASA	TEL	Futures							521
TELENOR ASA	TEL	Options	4,715	1,347	+250%	\$10,031,062	\$2,686,897	+273%	20,635
TGS NOPEC GEOP	TGS	Options	1,271	846	+50%	\$4,515,694	\$3,359,533	+34%	9,428
X5 RETAIL	FIVE	Options		70			\$153,500		1,060
YARA INTL	YAR	Futures							865
YARA INTL	YAR	Options	8,311	13,560	-39%	\$38,185,985	\$65,129,389	-41%	29,018
<b>Grand Total</b>			<b>351,509</b>	<b>583,848</b>	<b>-40%</b>	<b>\$1,892,604,465</b>	<b>\$2,557,306,762</b>	<b>-26%</b>	<b>2,188,439</b>