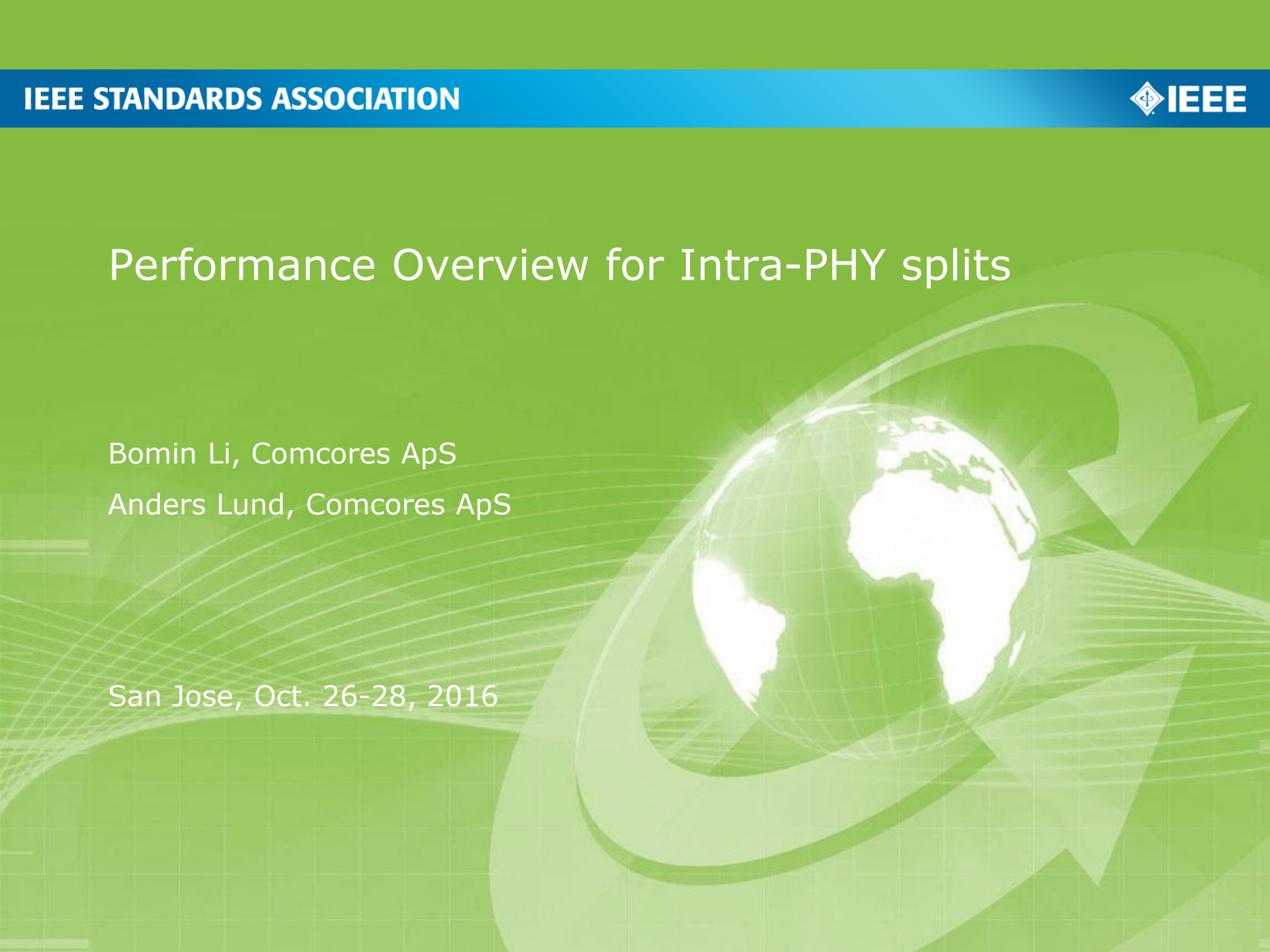


Performance Overview for Intra-PHY splits

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San Jose, Oct. 26-28, 2016



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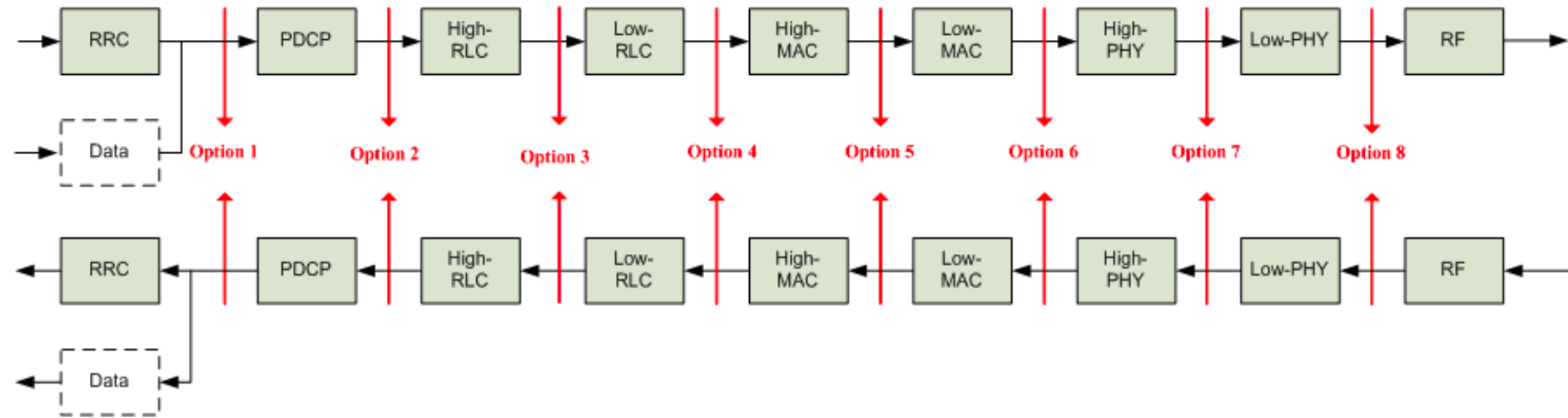
Performance Overview of Intra-PHY splits

Date: 2016-10-26

Author(s): Bomin Li& Anders Lund

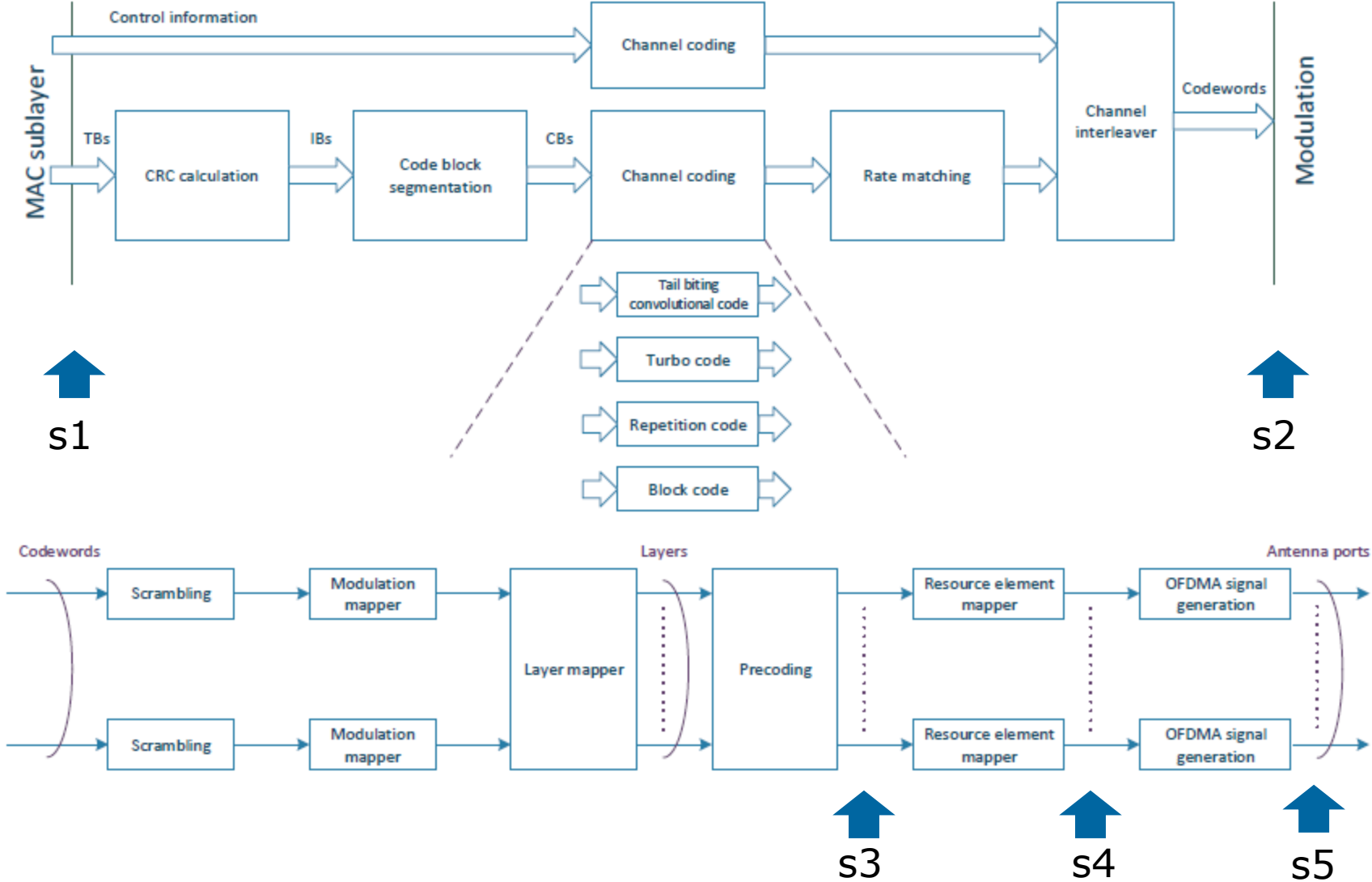
Name	Affiliation	Phone [optional]	Email [optional]
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Anders Lund	Comcores ApS		alu@Comcores.com

Overview of functional splits (3GPP)



Investigation of different splits between option 6 and 8

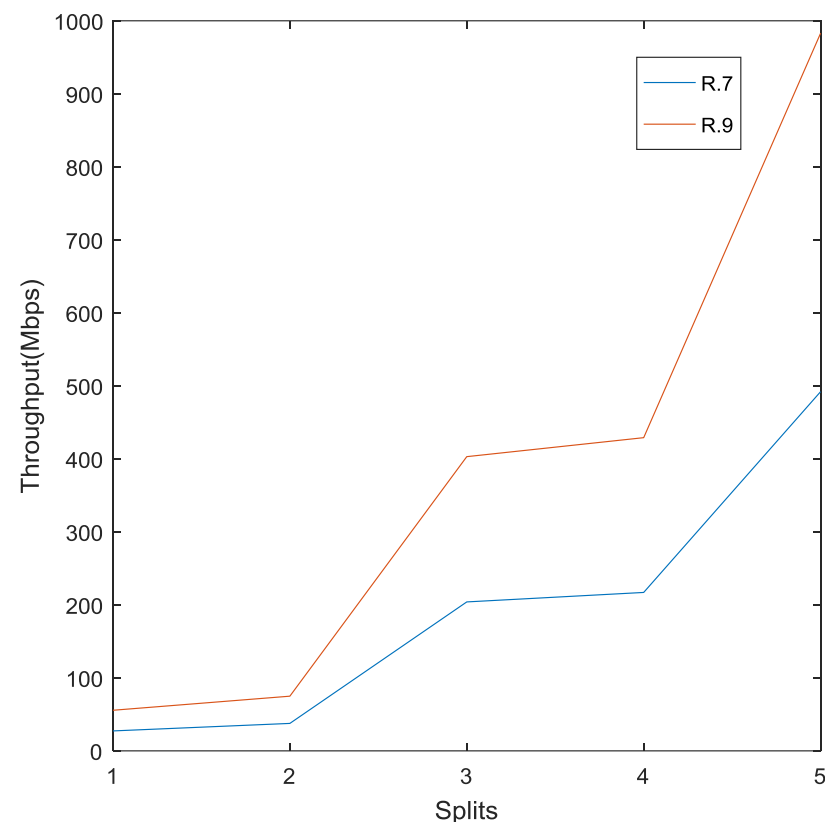
Downlink



DL user plane data (cont'd)

- Single antenna, 100% load

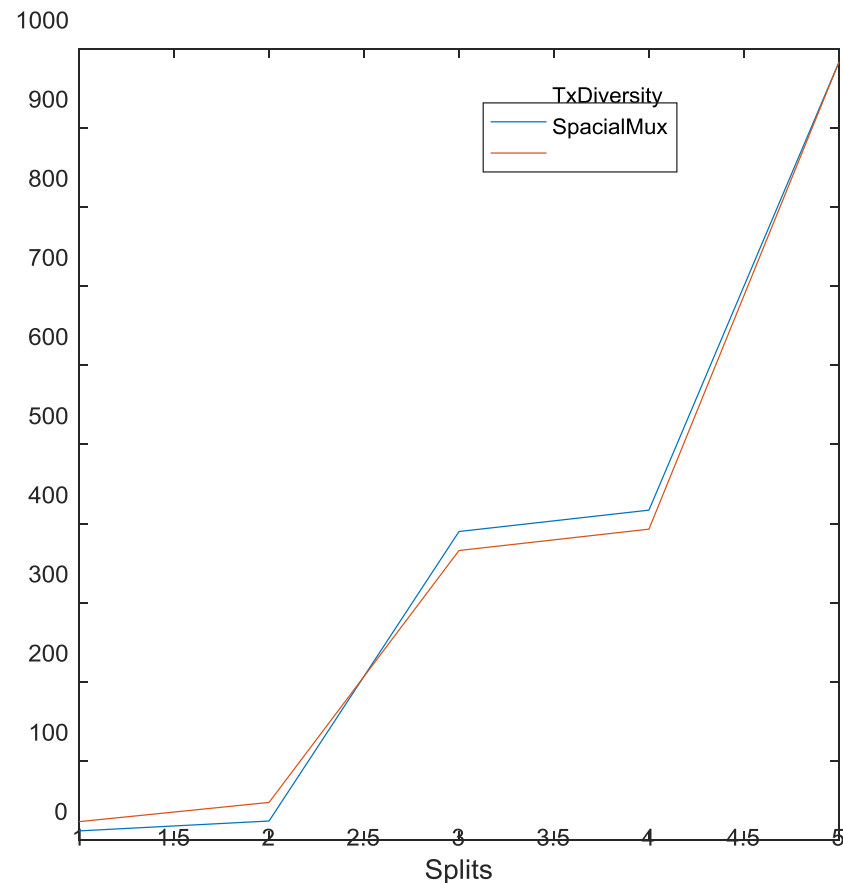
Splits	Throughput(Mbps) for different LTE signals	
	10MHz (R.7) (Mbps)	20MHz (R.9) (Mbps)
s1	27.3	55.6
s2	37.6	74.9
s3	204	403
s4	217	429
s5	492	983



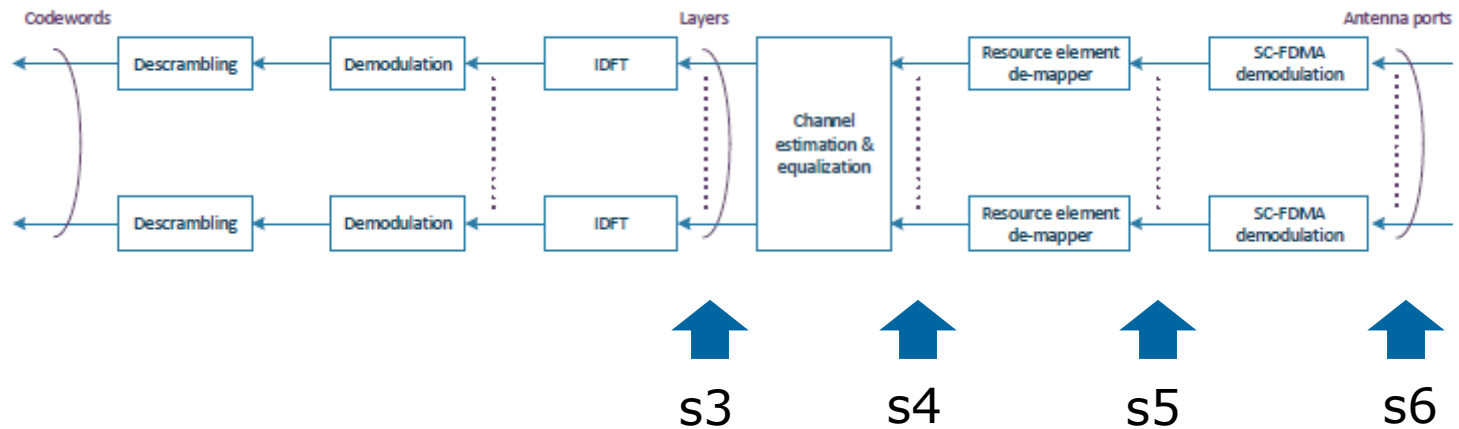
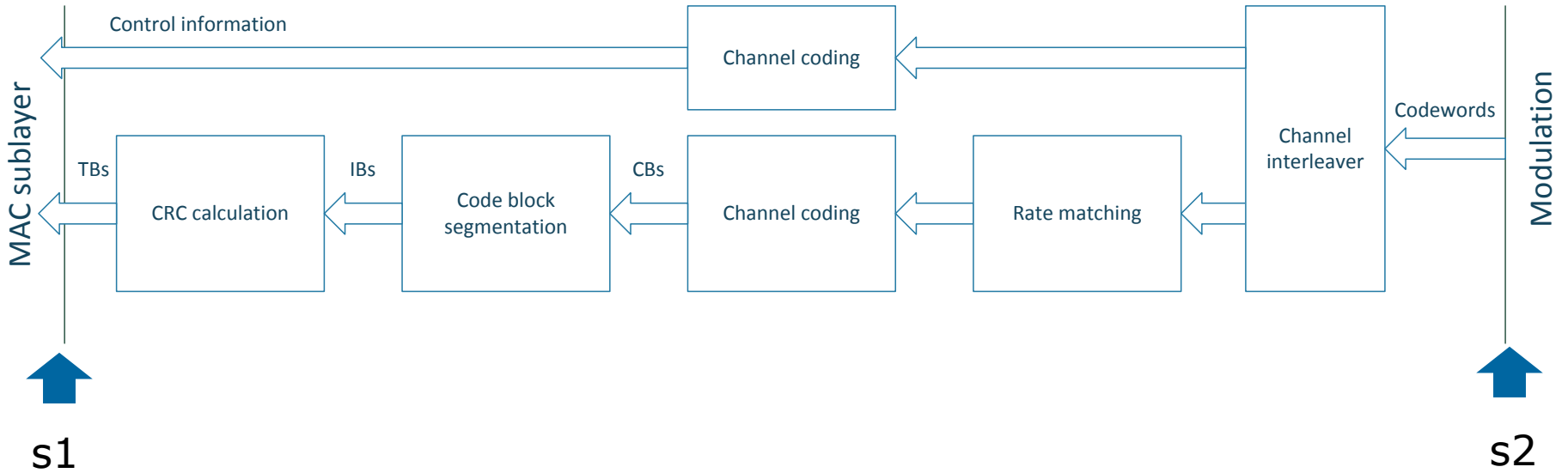
DL user plane data (cont'd)

- LTE 10MHz, two antennas, 100% load (R.11)

Splits	Throughput(Mbps) for different TX schemes	
	TxDiversity	SpacialMux
s1	11.7	23.4
s2	24.2	47.7
s3	390	366
s4	417	393
s5	983	983



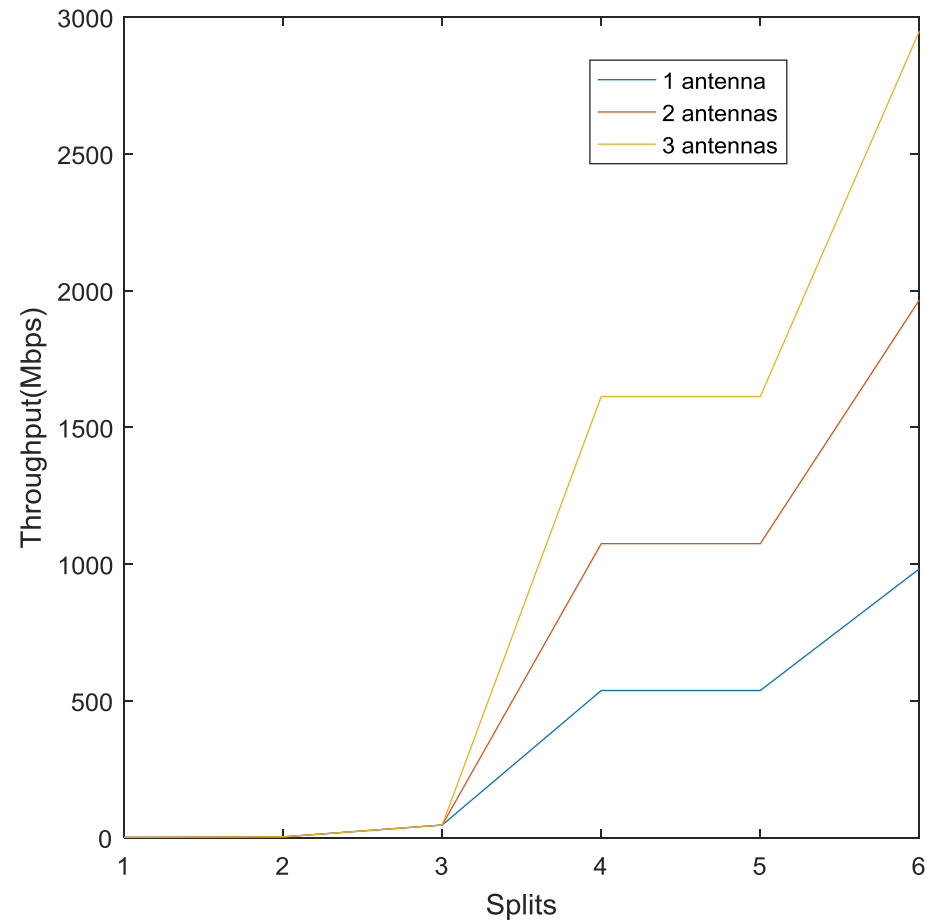
Uplink



UL user plane data

□ LTE 20MHz(A3-7)

Splits	Throughput(Mbps) for different number of antennas		
	1	2	3
s1	1.0	1.0	1.0
s2	2.9	2.9	2.9
s3	46.1	46.1	46.1
s4	538	1075	1613
s5	538	1075	1613
s6	983	1966	2949



UL user plane data (cont'd)

□ 1 Antenna

Splits	Throughput(Mbps) for different LTE signals	
	10MHz (A3-5)	20MHz (A3-7)
s1	0.52	1.0
s2	1.4	2.9
s3	23	46.1
s4	269	538
s5	269	538
s6	492	983

