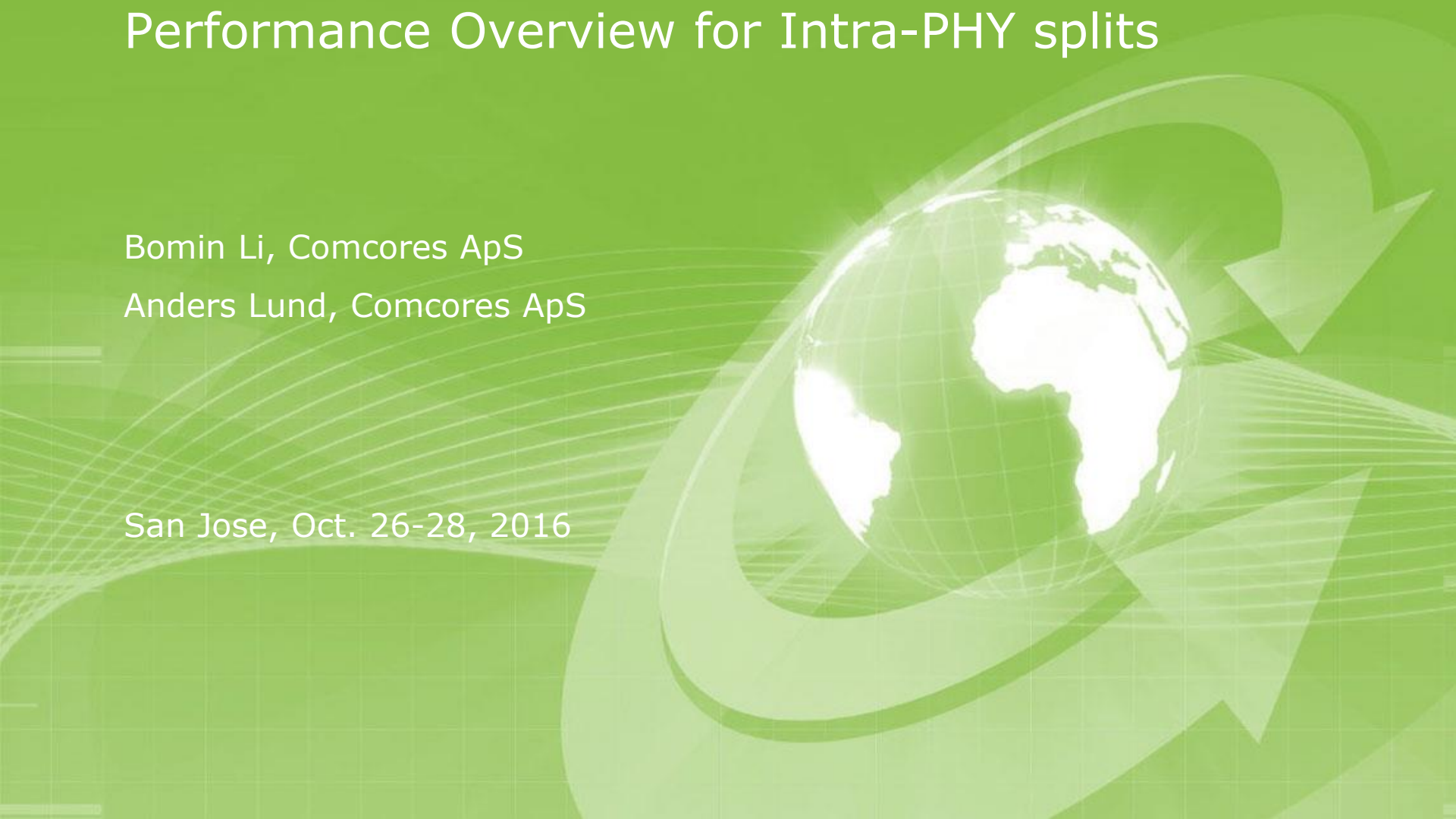


Performance Overview for Intra-PHY splits

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Anders Lund, Comcores ApS

San Jose, Oct. 26-28, 2016



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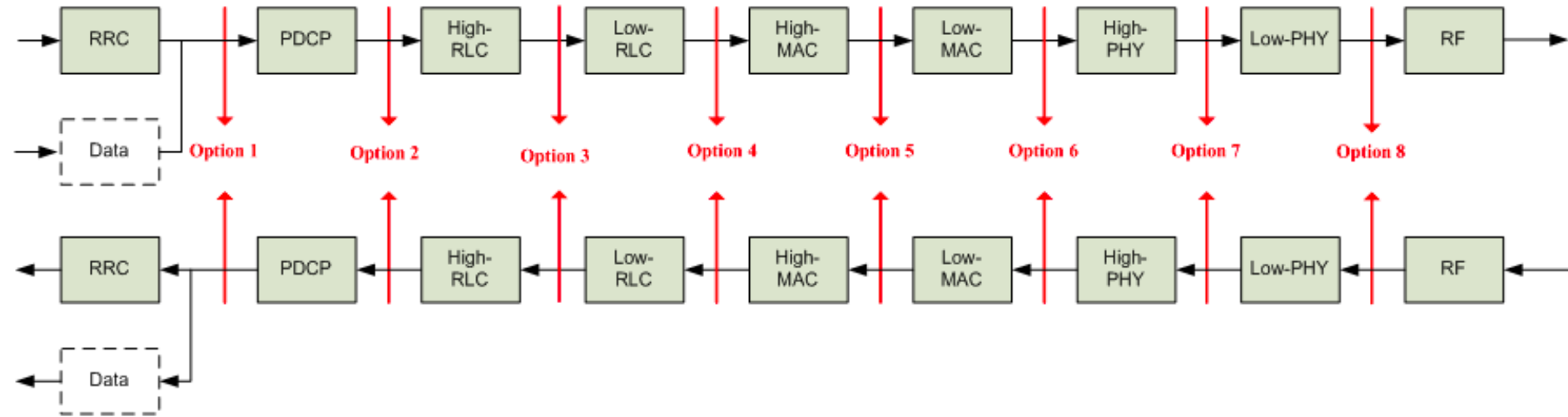
Performance Overview of Intra-PHY splits

Date: 2016-10-26

Author(s): Bomin Li& Anders Lund

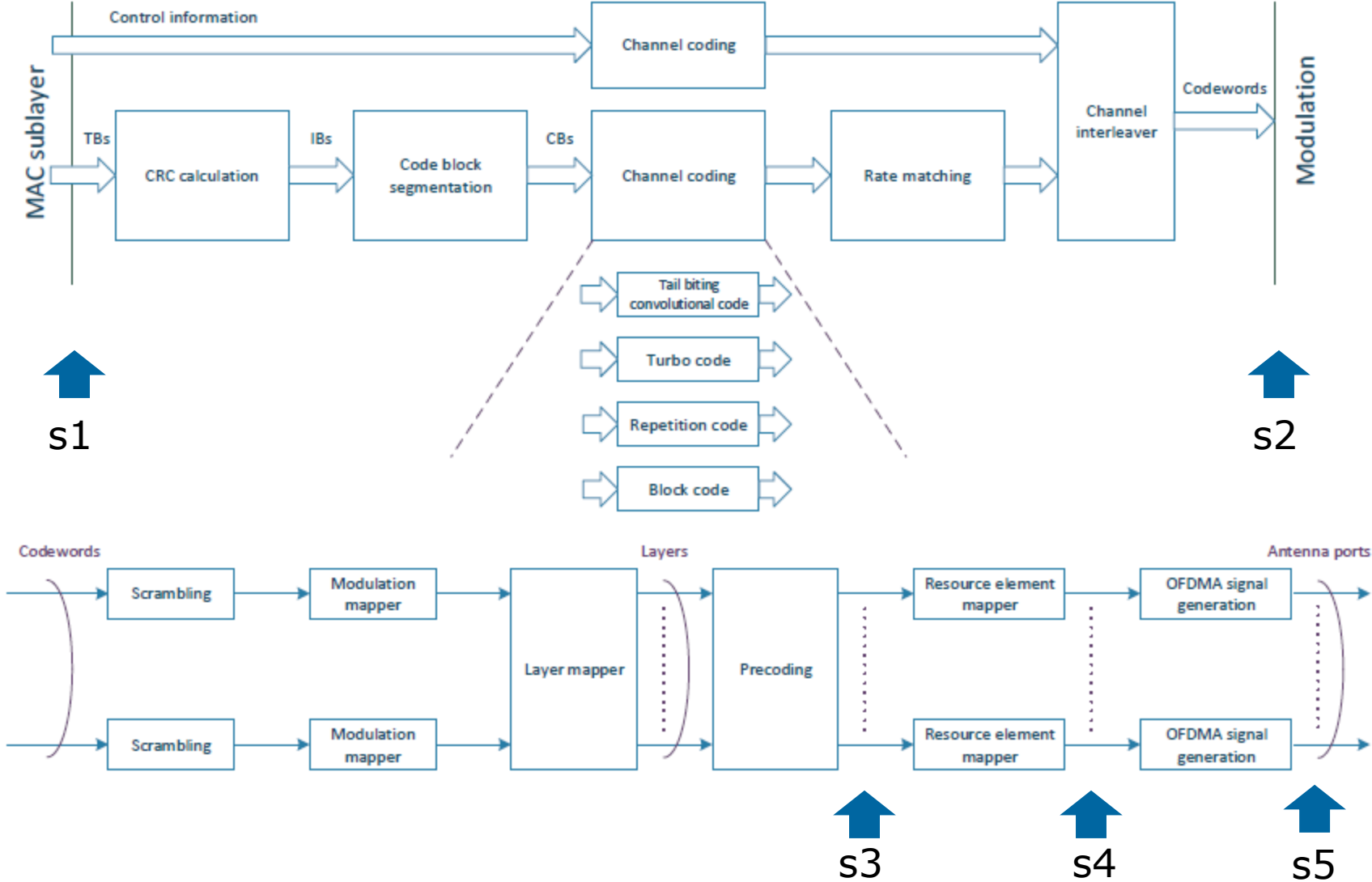
Name	Affiliation	Phone [optional]	Email [optional]
Bomin Li	Comcores ApS		bli@Comcores.com
Anders Lund	Comcores ApS		alu@Comcores.com

Overview of functional splits (3GPP)



Investigation of different splits between option 6 and 8

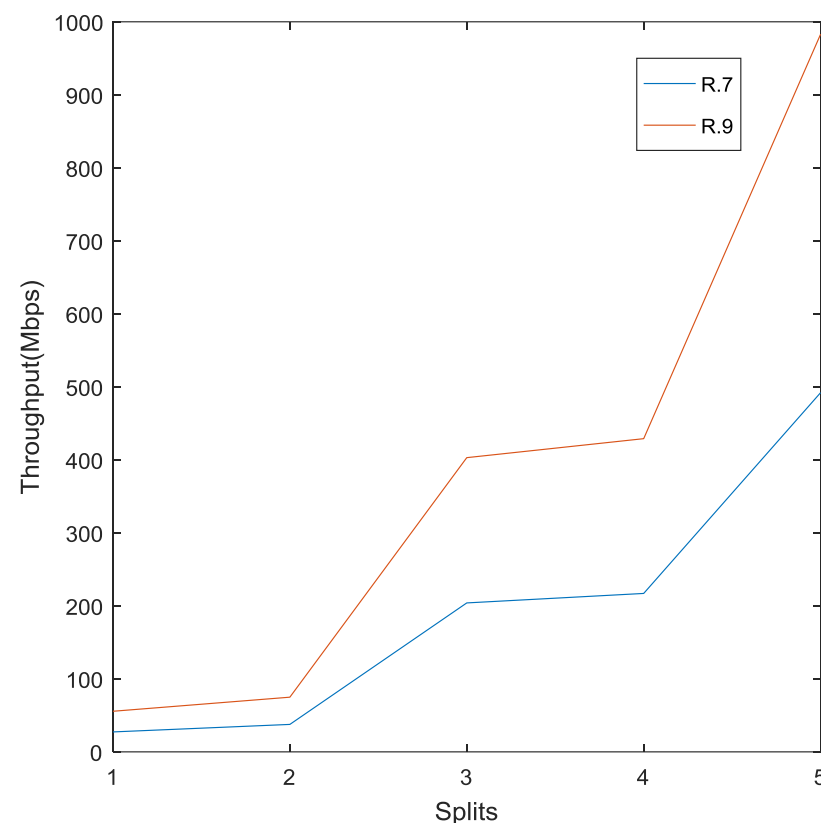
Downlink



DL user plane data (cont'd)

- ❑ Single antenna, 100% load

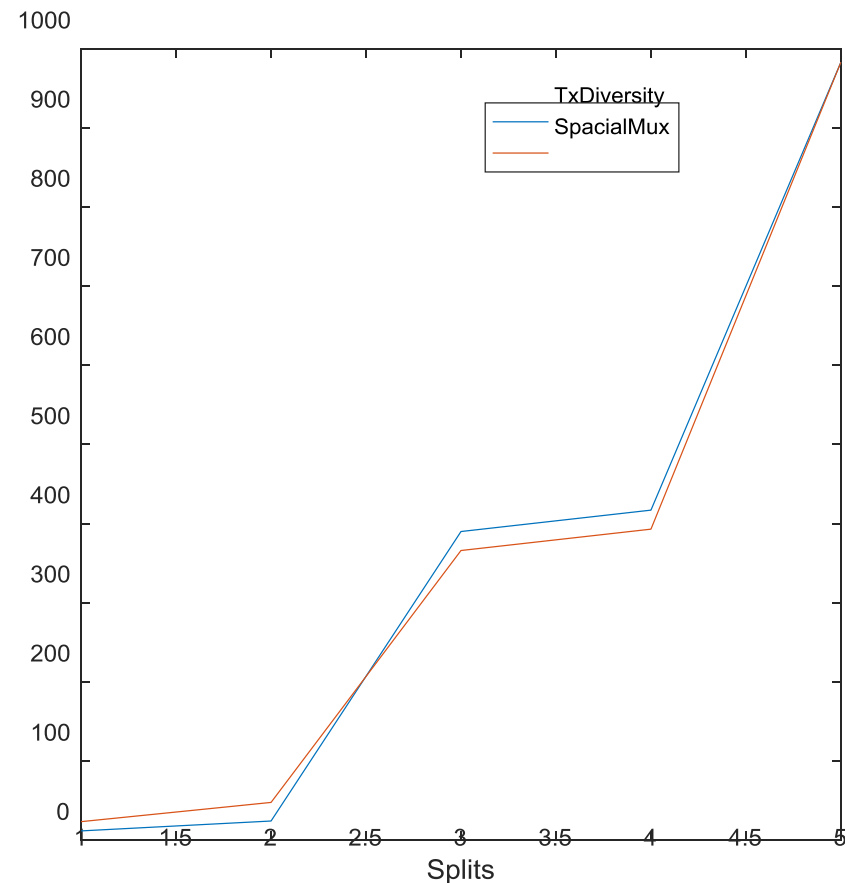
Splits	Throughput(Mbps) for different LTE signals	
	10MHz (R.7) (Mbps)	20MHz (R.9) (Mbps)
s1	27.3	55.6
s2	37.6	74.9
s3	204	403
s4	217	429
s5	492	983



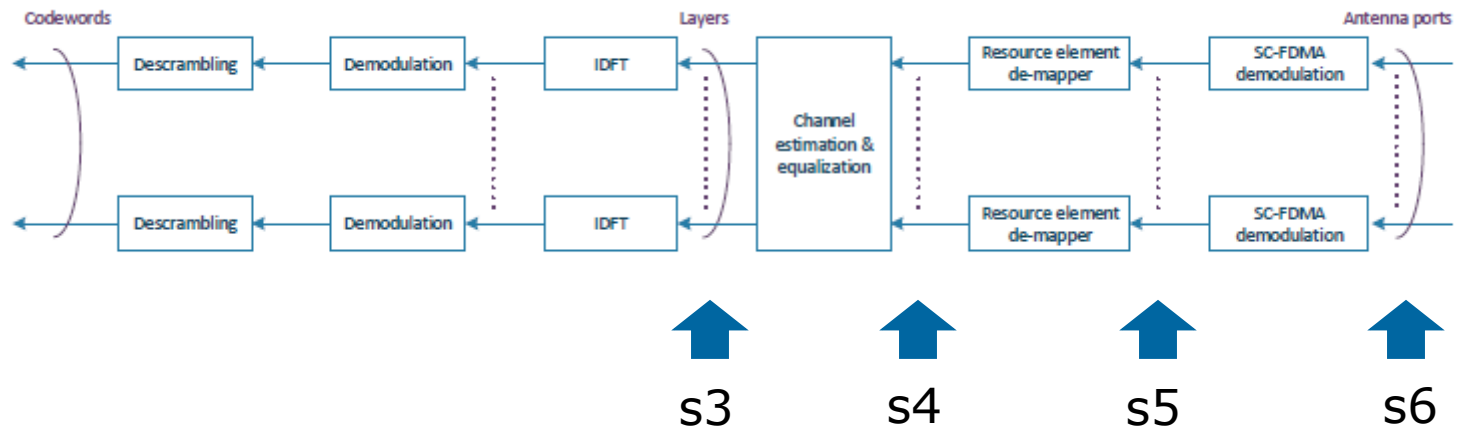
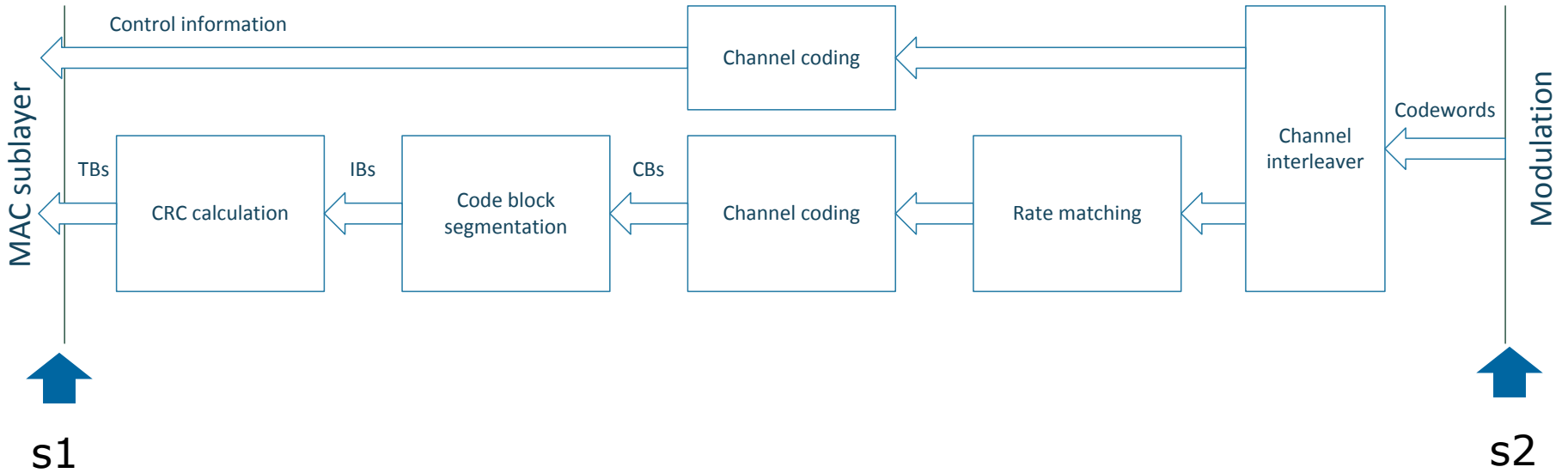
DL user plane data (cont'd)

- 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



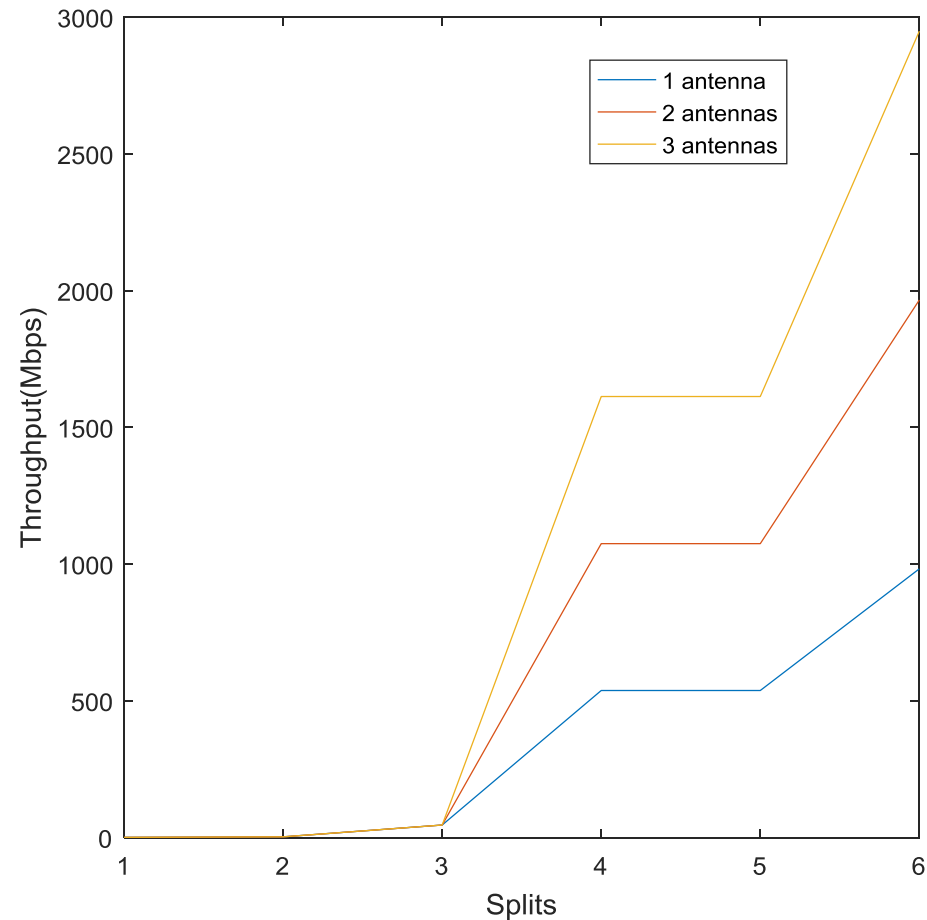
Uplink



UL user plane data

□ LTE 20MHz(A3-7)

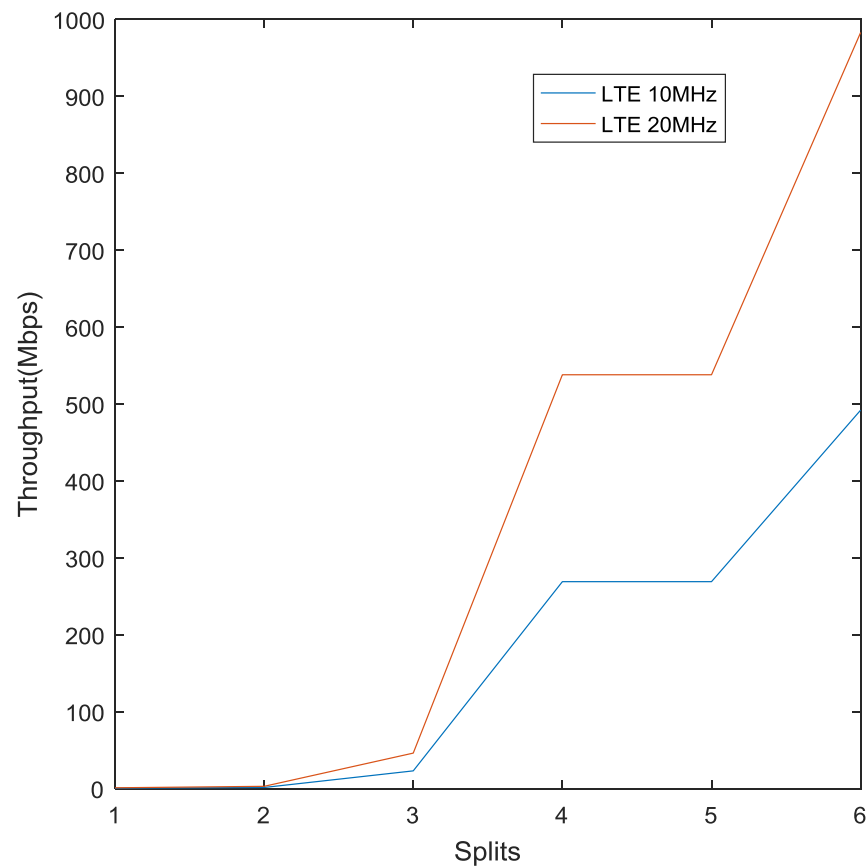
Splits	Throughput(Mbps) for different number of antennas		
	1	2	3
s1	1.0	1.0	1.0
s2	2.9	2.9	2.9
s3	46.1	46.1	46.1
s4	538	1075	1613
s5	538	1075	1613
s6	983	1966	2949



UL user plane data (cont'd)

□ 1 Antenna

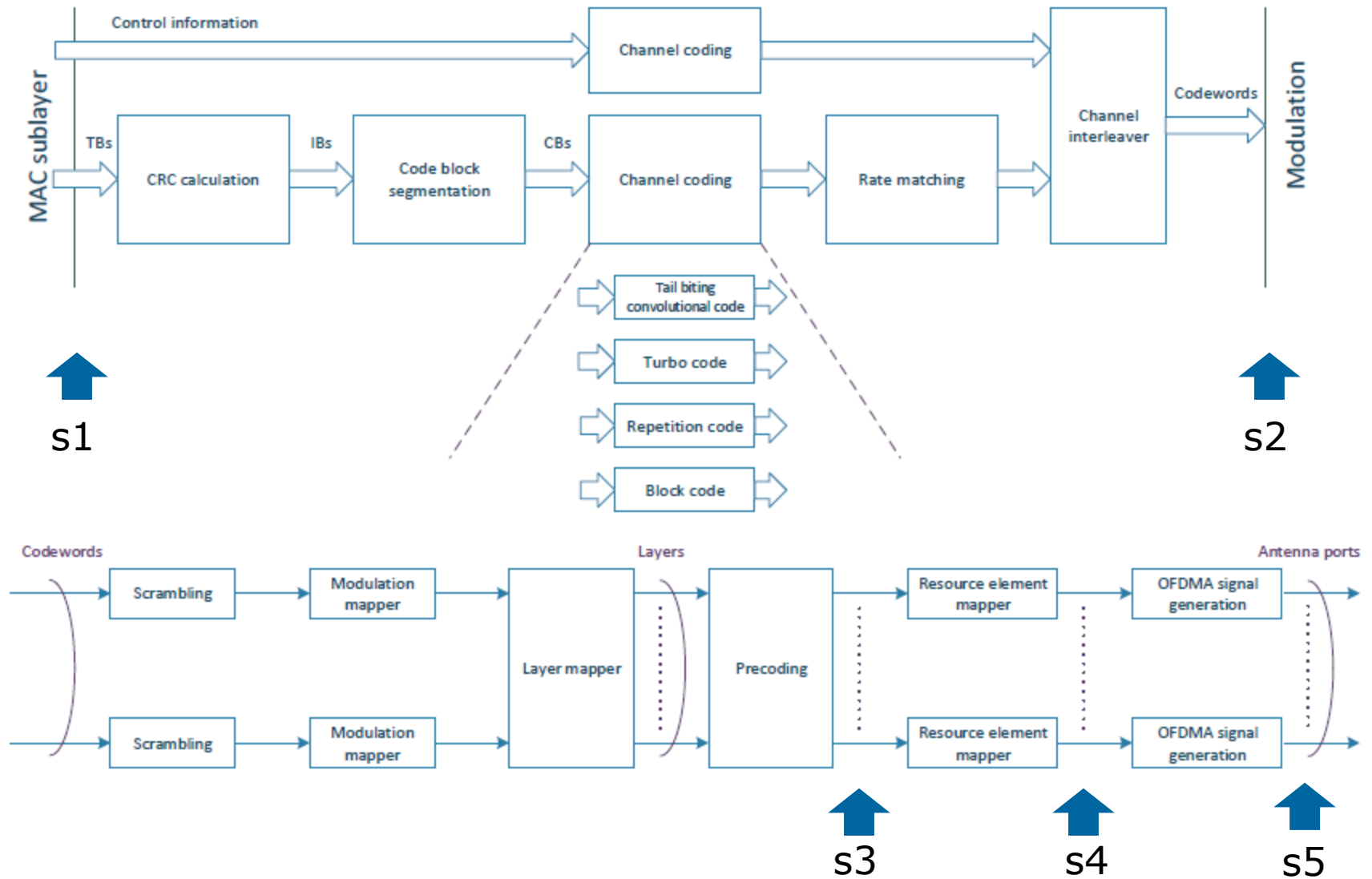
Splits	Throughput(Mbps) for different LTE signals	
	10MHz (A3-5)	20MHz (A3-7)
s1	0.52	1.0
s2	1.4	2.9
s3	23	46.1
s4	269	538
s5	269	538
s6	492	983



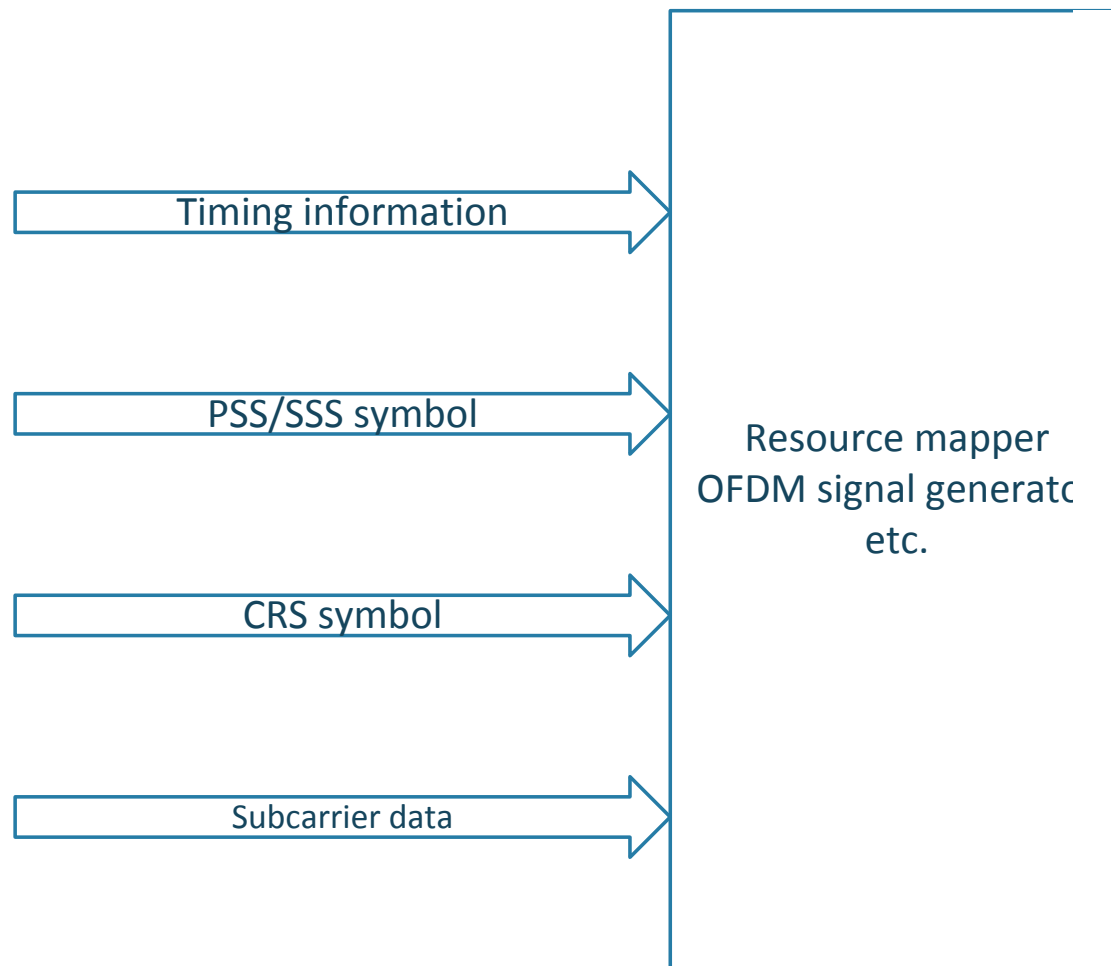
Example of listing parameters etc.

- Purpose:
 - to provide an overview of the necessary information delivered over a certain split
 - to evaluate the performance

Interpretation of DL s3



Interpretation of DL s3 (cont'd)



Questions?