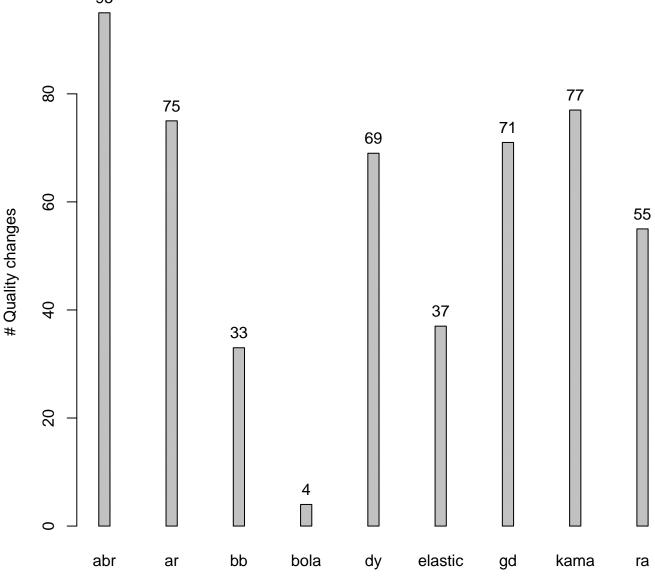


Network profile: p1 Sample: t1 Metric: # quality change Buffer: 30/60



Buffer: 30/60 3165.17 3255.48 3178.52 3241.71 3242.46 3142.2 3182.82 3000 _2923.41 2500 2000 1938.93 Kbps 1500 1000 500 elastic abr bb bola dy kama ar gd ra

Network profile: p1 Sample: t2 Metric: Avg-Bitrate

Network profile: p1 Sample: t2 Metric: Inefficiency **Buffer: 30/60** 0.384054 0.35 0.326533 0.30 0.25 0.222902 0.222082 0.220975 0.208206_{0.202423} Inefficiency 0.20 0.176053 0.15 0.10 0.05 elastic abr bb bola dy kama ar gd ra

Network profile: p1 Sample: t2 Metric: # quality change **Buffer: 30/60** 88 80 9 # Quality changes 40 23 23 22 22 20 19 20 9 4 elastic abr bb bola kama dy gd ar ra

Network profile: p1 Sample: t3 Metric: Avg-Bitrate **Buffer: 30/60** 3271.61 3192.58 3153.84 3166.03 3152.88 3175.15 3171.17 3000 2887.93 2719.58 2500 2000 Kbps 1500 1000 500

abr

bb

ar

bola

elastic

gd

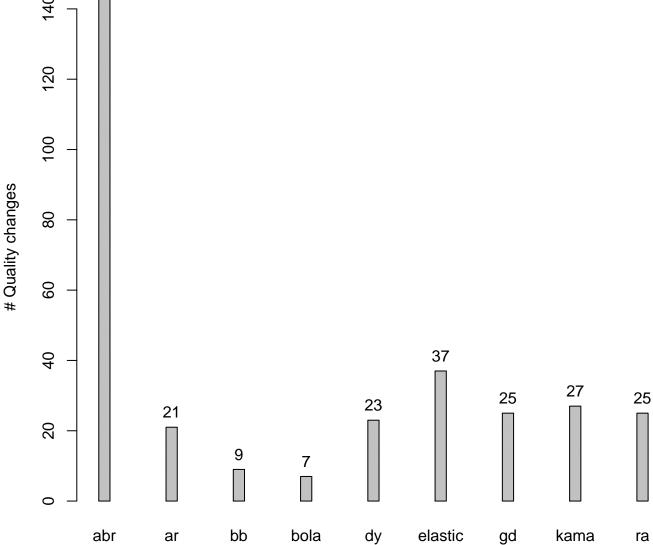
kama

ra

dy

Network profile: p1 Sample: t3 Metric: Inefficiency **Buffer: 30/60** 0.369909 0.35 0.325825 0.296171 0.30 0.275982 0.262869 0.261537 0.260583 0.25 0.240502 0.239121 Inefficiency 0.20 0.15 0.10 0.05 elastic abr bb bola dy kama ar gd ra

Network profile: p1 Sample: t3 Metric: # quality change Buffer: 30/60



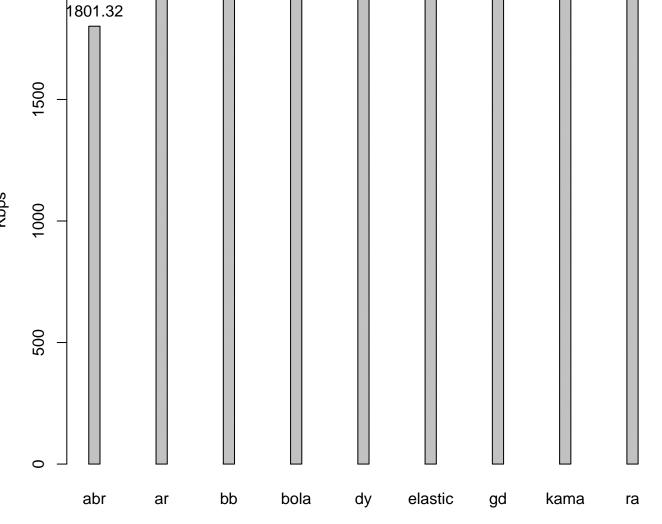
Network profile: p1 Sample: t4 Metric: Avg-Bitrate **Buffer: 30/60** 3398.33 _{3353.85} 3399.38 3380.6 3357.97 3346 3227.89 3000 2506.9 2500 2303.02 2000 Kbps 1500 1000 500 bola elastic abr bb dy gd kama ar ra

Network profile: p1 Sample: t4 Metric: Inefficiency Buffer: 30/60 0.41064 0.332952 0.228857 Inefficiency 0.19548 0.190469 0.172031 ^{0.18215} 0.183265 0.166993 0.1 bola elastic abr bb dy kama ar gd ra

Network profile: p1 Sample: t4 Metric: # quality change **Buffer: 30/60** 78 9 # Quality changes 4 29 27 27 27 25 21 20 11 6 elastic abr bb bola kama dy gd ar ra

Network profile: p1 Sample: t5 Metric: Avg-Bitrate **Buffer: 30/60** 2111.62 2084.76 _{2058.48} 2084.56 _{2065.92} 2108.38 2071.02 1961.47

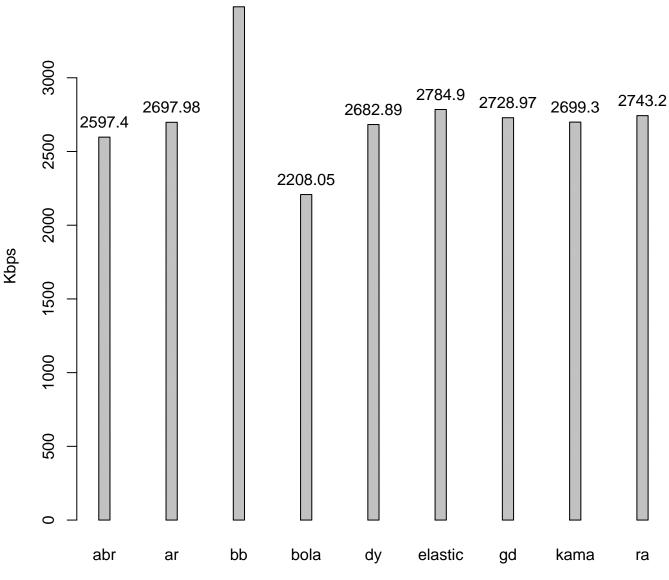
2000

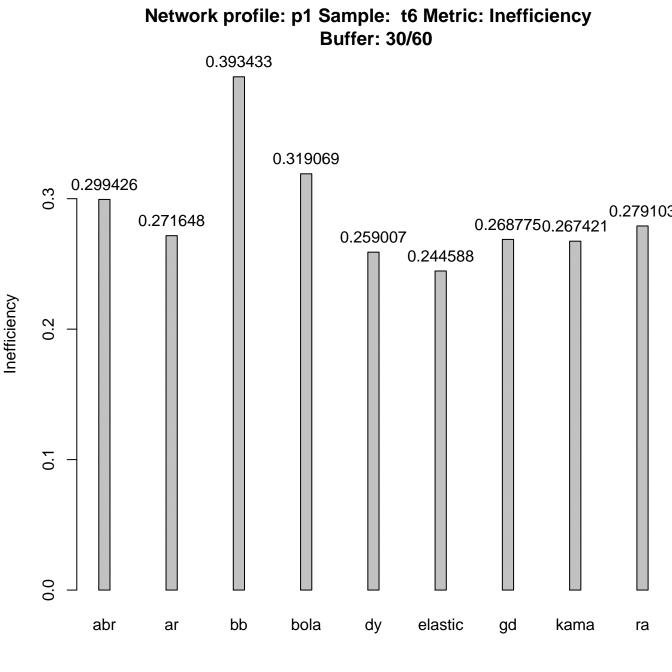


Network profile: p1 Sample: t5 Metric: Inefficiency Buffer: 30/60 0.509916 0.426284 0.391273 $0.3681470.370662^{\hbox{0.380584}}0.369985$ 0.364093 0.339857 0.3 Inefficiency elastic abr bb bola dy kama ar gd ra

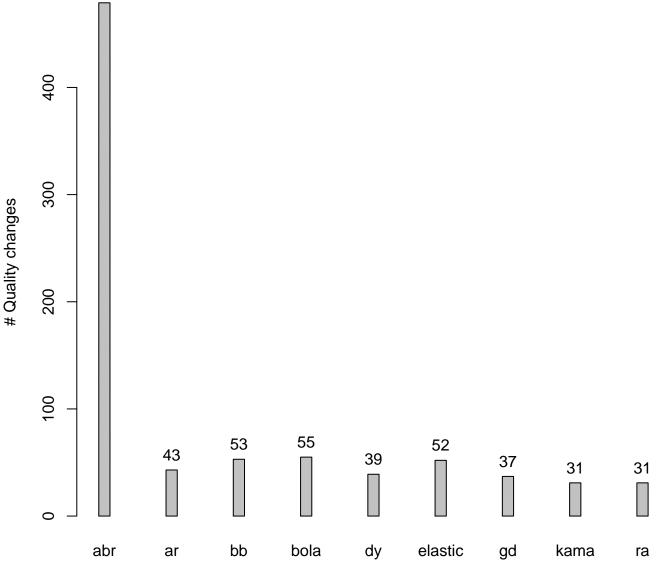
Network profile: p1 Sample: t5 Metric: # quality change **Buffer: 30/60** 26 25 20 20 # Quality changes 15 10 10 8 8 6 6 6 6 2 elastic abr bb bola kama dy gd ar ra

Network profile: p1 Sample: t6 Metric: Avg-Bitrate
Buffer: 30/60
3481.43





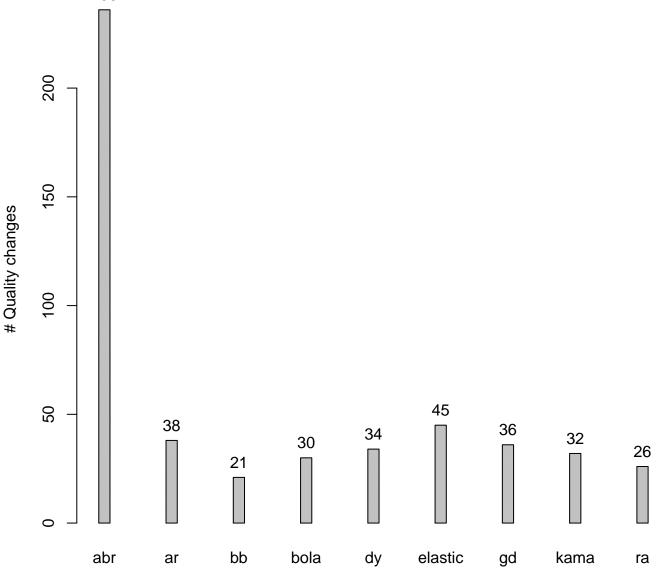
Network profile: p1 Sample: t6 Metric: # quality change Buffer: 30/60

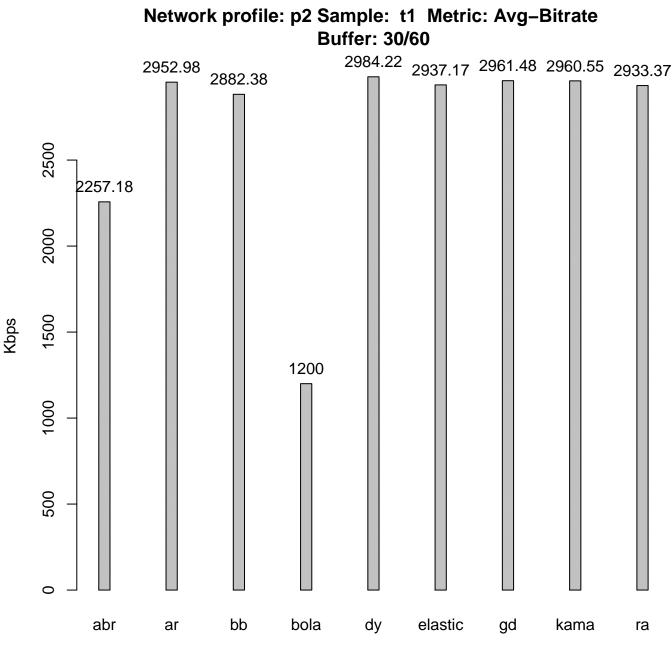


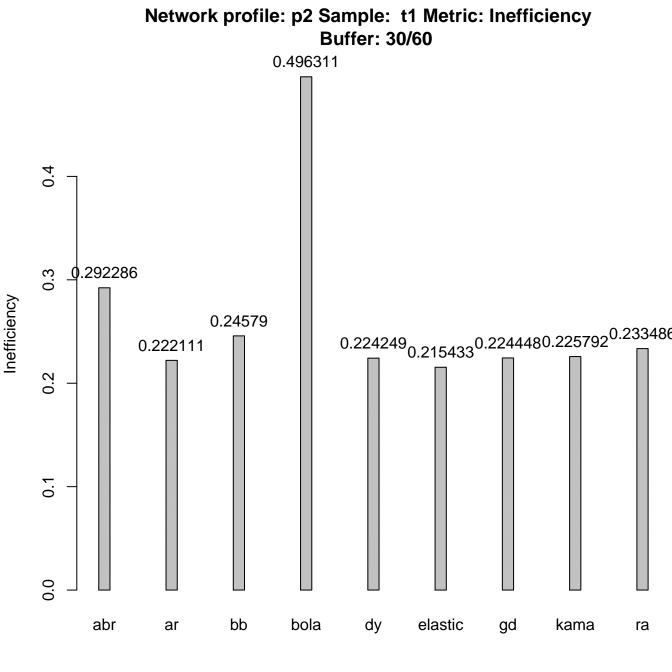
Network profile: p1 Sample: t7 Metric: Avg-Bitrate **Buffer: 30/60** 2620.83 2612.64 2635.24 2648.68 2662.98 2644.06 2629.26 2624.08 2580.9 2500 2000 1500 1000 500 elastic abr bb bola dy gd kama ar ra

Network profile: p1 Sample: t7 Metric: Inefficiency Buffer: 30/60 0.37192 0.35 -0.3390050.30 0.261376 0.25 0.235006 0.230766 0.227197 0.22393 0.221226 0.200599 Inefficiency 0.20 0.15 0.10 0.05 elastic abr bb bola dy kama ar gd ra

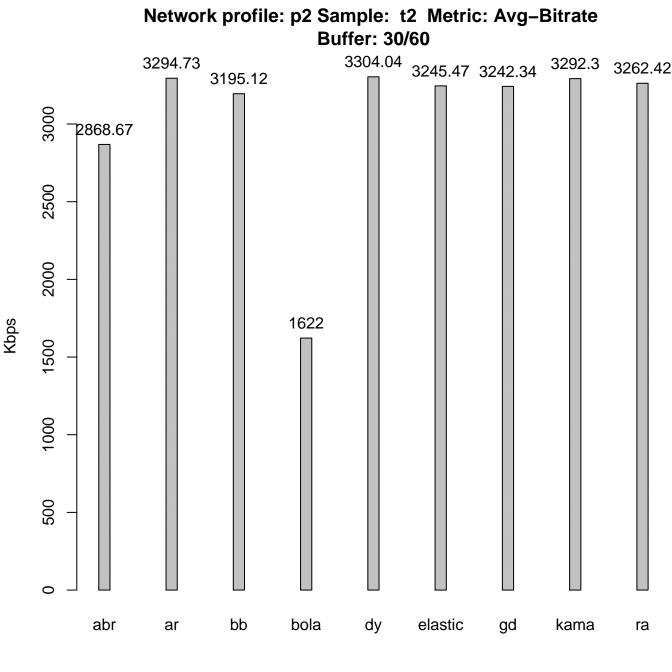
Network profile: p1 Sample: t7 Metric: # quality change Buffer: 30/60

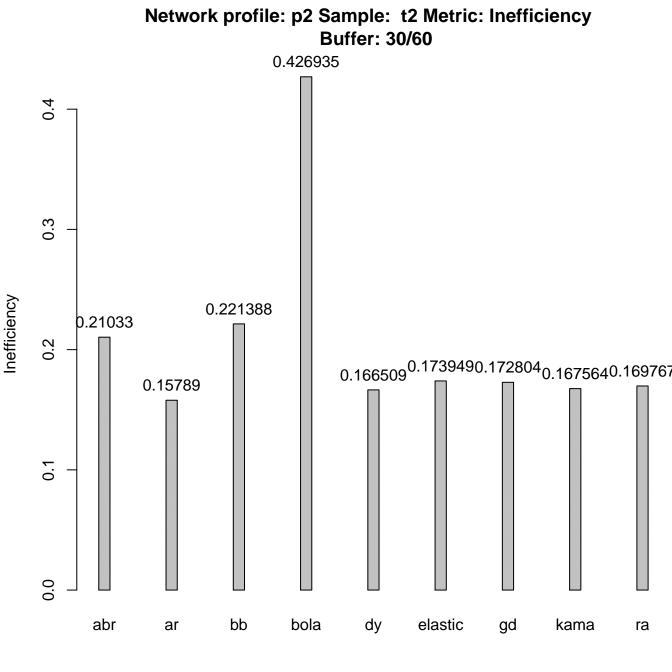




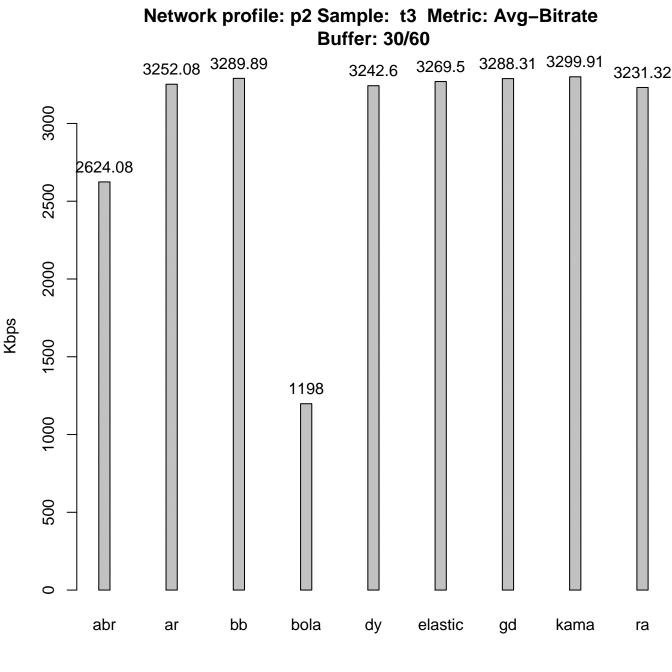


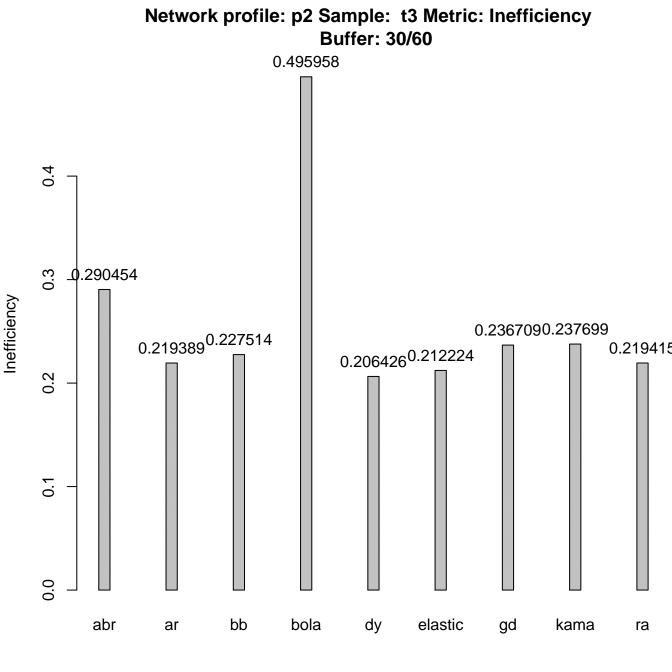
Network profile: p2 Sample: t1 Metric: # quality change **Buffer: 30/60** 108 100 80 70 # Quality changes 62 60 58 9 50 42 40 34 20 abr bola elastic kama bb dy gd ar ra



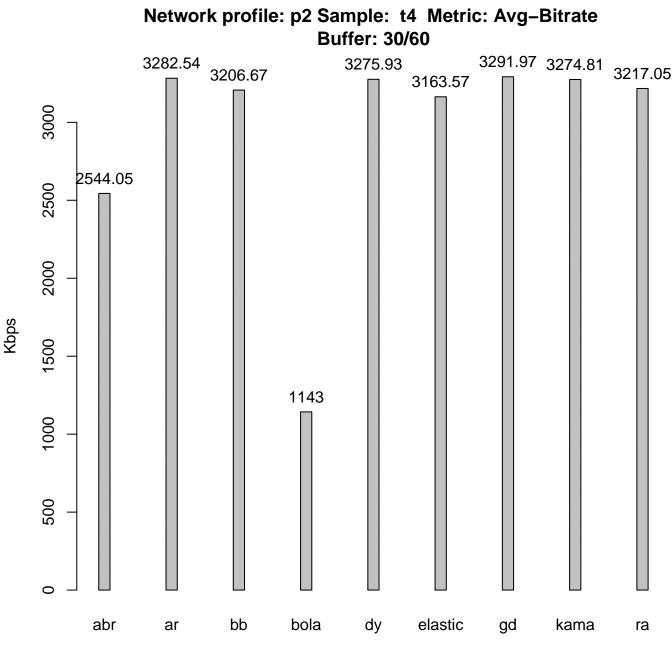


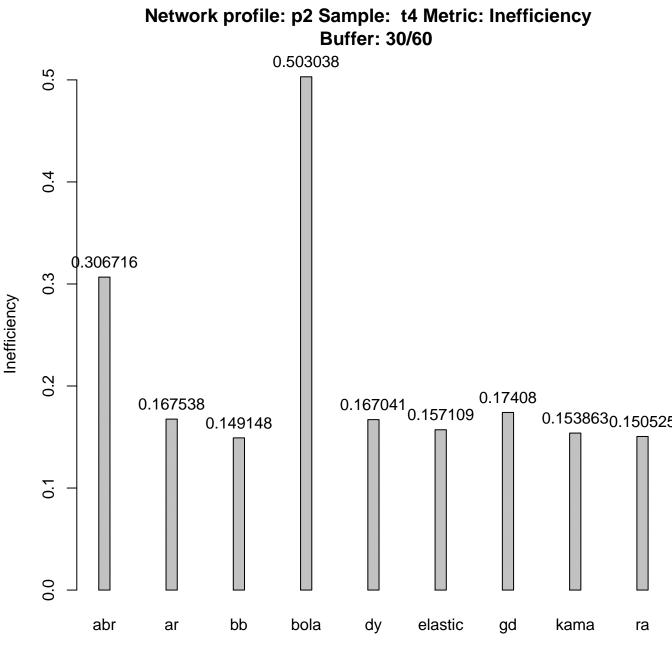
Network profile: p2 Sample: t2 Metric: # quality change **Buffer: 30/60** 82 8 9 # Quality changes 40 22 20 18 16 14 14 14 8 elastic abr bb bola kama dy gd ar ra





Network profile: p2 Sample: t3 Metric: # quality change **Buffer: 30/60** 102 100 80 # Quality changes 9 46 46 44 38 4 36 30 20 6 elastic abr bola kama bb dy gd ar ra





Network profile: p2 Sample: t4 Metric: # quality change **Buffer: 30/60** 74 70 9 20 # Quality changes 40 32 30 30 28 24 24 20 18 14 10

abr

ar

bb

bola

dy

elastic

kama

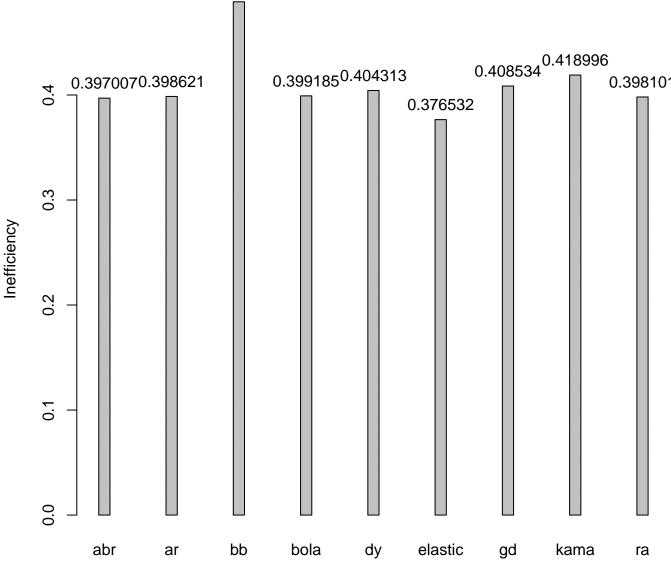
ra

gd

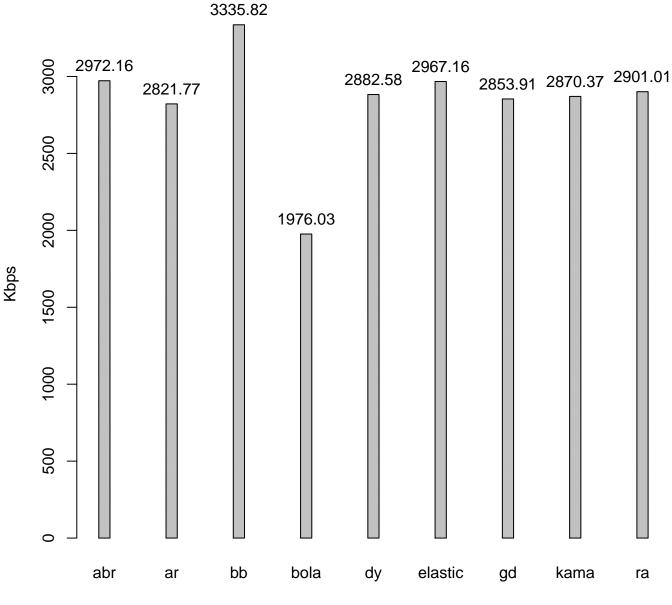
Network profile: p2 Sample: t5 Metric: Avg-Bitrate **Buffer: 30/60** 1962.24 1962.5 1964.61 1955.92 1922.32 1908.4 1886.82 1853.61 1838.48 1500 500 bola elastic abr bb dy gd kama ar ra

Network profile: p2 Sample: t5 Metric: Inefficiency
Buffer: 30/60

0.488738

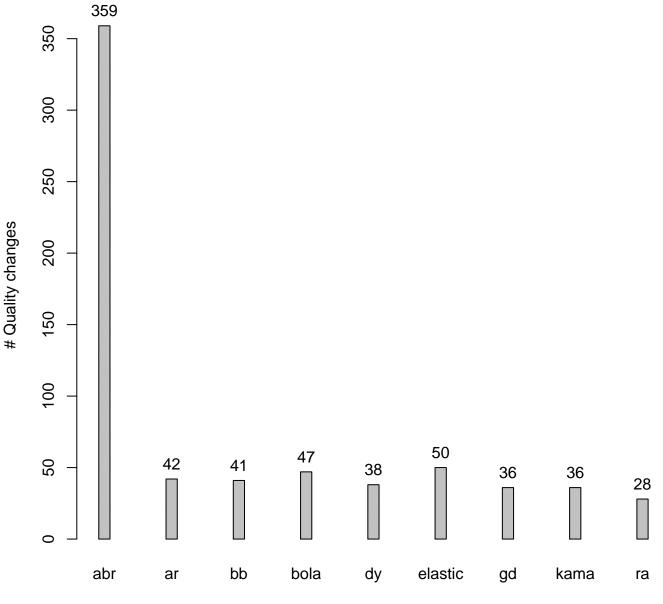


Network profile: p2 Sample: t5 Metric: # quality change **Buffer: 30/60** 16 12 10 10 10 10 # Quality changes 9 8 8 2 4 abr bola elastic kama bb dy gd ar ra Network profile: p2 Sample: t6 Metric: Avg-Bitrate Buffer: 30/60

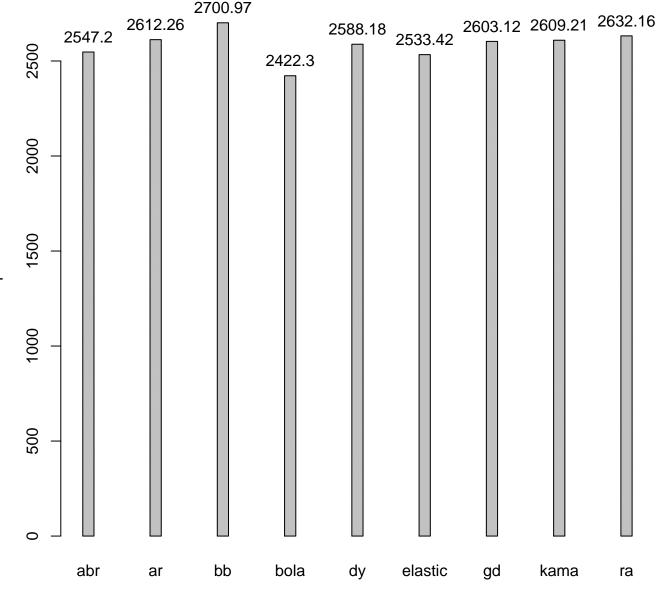


Network profile: p2 Sample: t6 Metric: Inefficiency Buffer: 30/60 0.385742 0.35353 0.318529 0.297417 0.3 0.2688690.262916 0.265732 0.260855 0.237553 Inefficiency 0.1 elastic abr bb bola dy kama ar gd ra

Network profile: p2 Sample: t6 Metric: # quality change
Buffer: 30/60

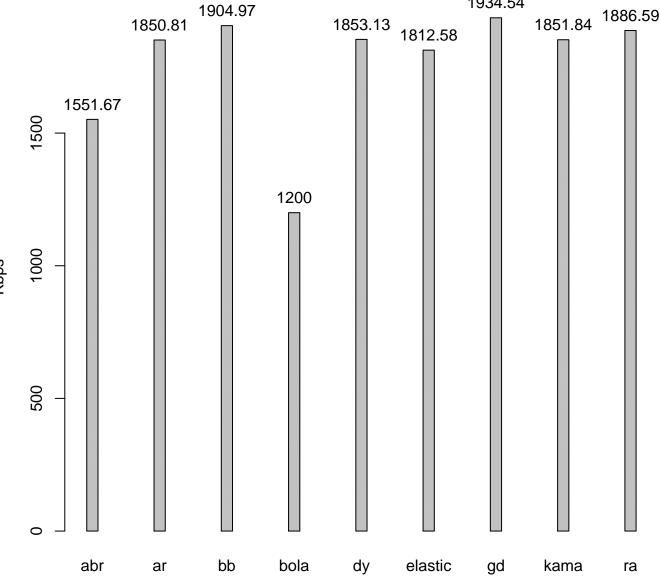


Network profile: p2 Sample: t7 Metric: Avg-Bitrate
Buffer: 30/60
2700.97



Network profile: p2 Sample: t7 Metric: Inefficiency Buffer: 30/60 0.3219270.322091 0.31586 0.30 0.256027 0.25 0.242201 0.236544 0.232747 0.231857 0.200165 0.20 Inefficiency 0.10 0.05 elastic abr bb bola dy kama ar gd ra

Network profile: p2 Sample: t7 Metric: # quality change **Buffer: 30/60** 124 120 100 80 # Quality changes 9 40 40 28 24 18 20 16 16 16 14 elastic abr bb bola kama dy gd ar ra



Network profile: p3 Sample: t1 Metric: Inefficiency **Buffer: 30/60** 0.369505 0.35 0.319468 0.30 0.27295 0.25 0.243891 0.241691 0.237765 0.227748 0.211464 0.196962 Inefficiency 0.20 0.15 0.10 0.05 bola elastic abr bb dy kama ar gd ra

Network profile: p3 Sample: t1 Metric: # quality change **Buffer: 30/60** 142 140 120 100 # Quality changes 80 9 57 52 50 47 42 39 40 36 20

bola

dy

bb

abr

ar

elastic

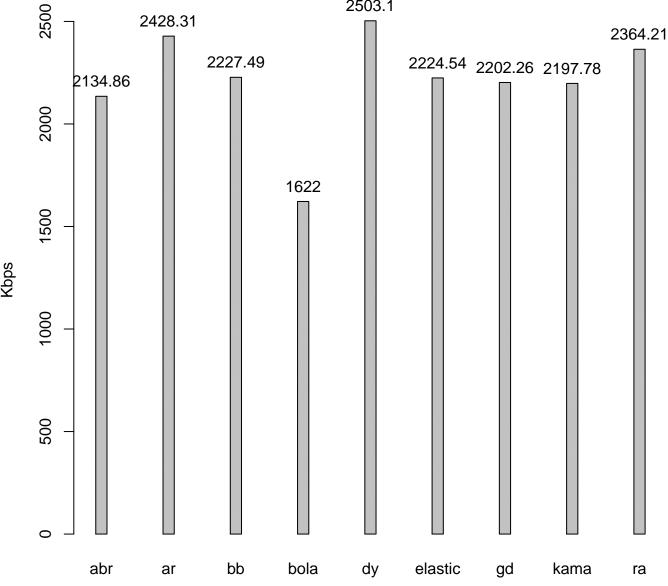
kama

ra

gd

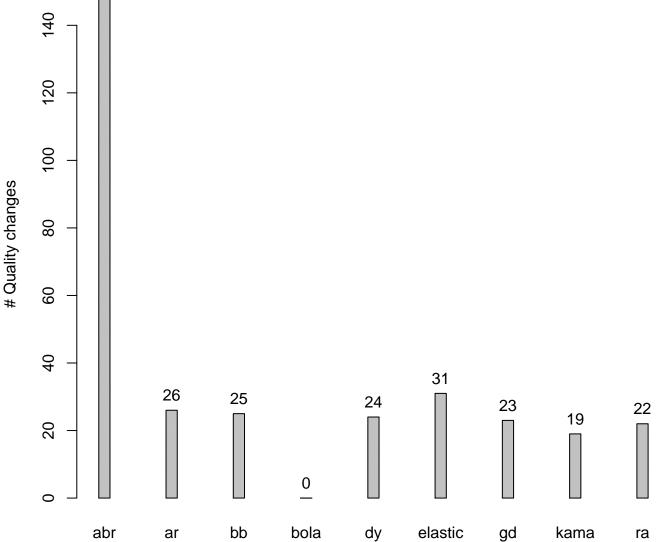
Network profile: p3 Sample: t2 Metric: Avg-Bitrate
Buffer: 30/60

2503.1
2428.31

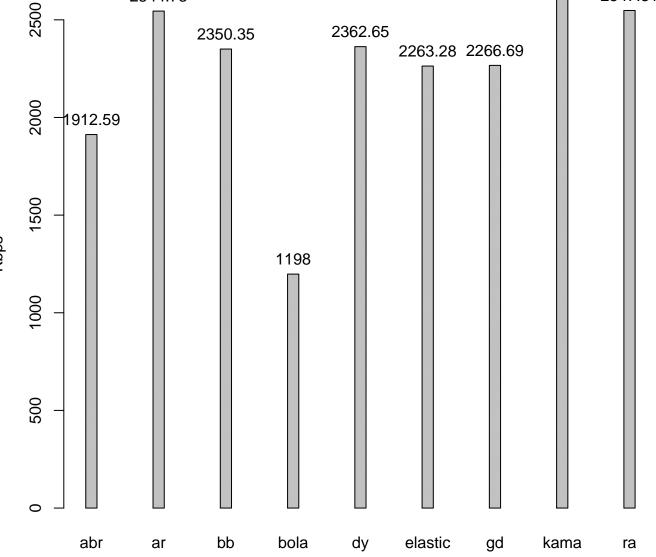


Network profile: p3 Sample: t2 Metric: Inefficiency **Buffer: 30/60** 0.245121 0.211896 0.196087 0.200238 0.195333 0.200032 0.20 0.190443 0.171806 0.150449 0.15 Inefficiency 0.10 0.05 elastic abr bb bola dy kama ar gd ra

Network profile: p3 Sample: t2 Metric: # quality change
Buffer: 30/60



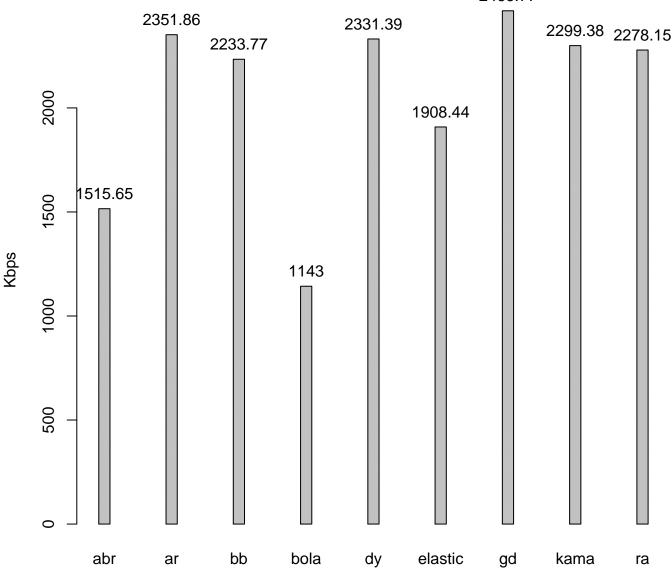
Network profile: p3 Sample: t3 Metric: Avg-Bitrate **Buffer: 30/60** 2628.13 2547.81 2544.73 2362.65 2350.35 2263.28 2266.69



Network profile: p3 Sample: t3 Metric: Inefficiency **Buffer: 30/60** 0.364252 0.35 0.30 **4**.290966 0.25 0.214381 0.20 Inefficiency 0.175998^{0.182033} 0.177786 0.171915 0.161808 0.15 0.141561 0.10 0.05 bola elastic abr bb dy kama ar gd ra

Network profile: p3 Sample: t3 Metric: # quality change **Buffer: 30/60** 162 150 100 # Quality changes 65 52 50 40 38 33 31 21 elastic abr bola kama bb dy gd ar ra

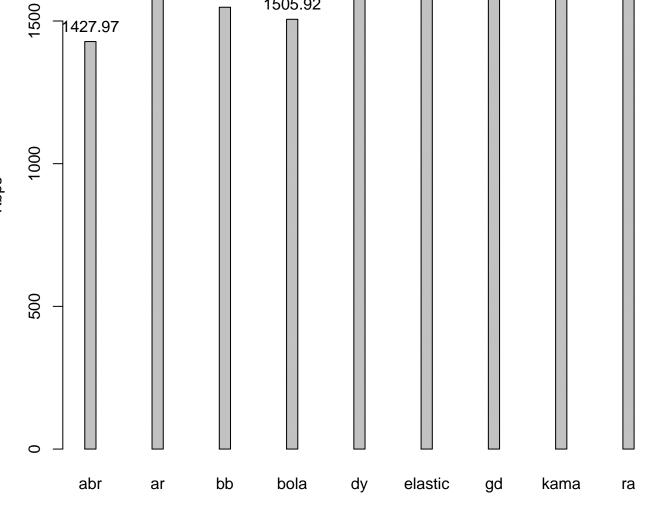
Network profile: p3 Sample: t4 Metric: Avg-Bitrate
Buffer: 30/60
2466.77



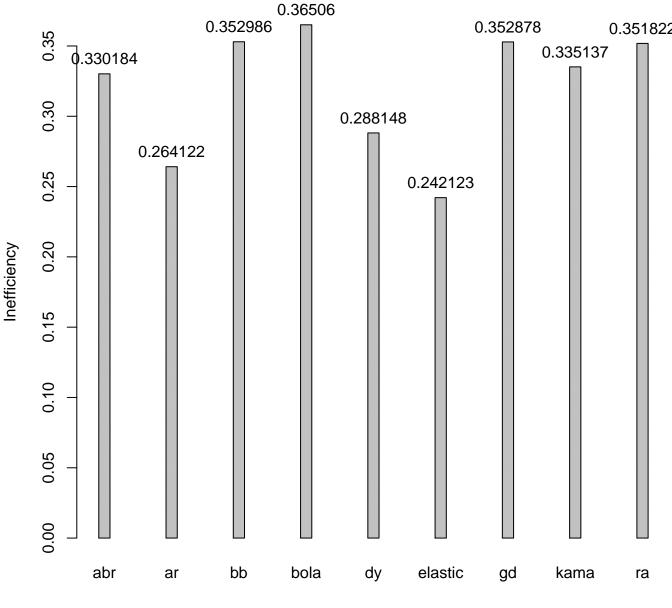
Network profile: p3 Sample: t4 Metric: Inefficiency **Buffer: 30/60** 0.35928 0.35 0.30 0.283976 0.25 0.212795 0.20 Inefficiency $0.180591^{0.186055}_{-----}0.178529$ 0.176677 0.1543930.156007 0.15 0.10 0.05 elastic abr bb bola dy kama ar gd ra

Network profile: p3 Sample: t4 Metric: # quality change **Buffer: 30/60** 126 120 100 80 # Quality changes 9 47 43 41 39 40 31 25 20 20 elastic abr bb bola kama dy gd ar ra

Network profile: p3 Sample: t5 Metric: Avg-Bitrate **Buffer: 30/60** 1798.51 1639.38 1598.96 1613.17 1587.98 1585.77 1548.13 1505.92

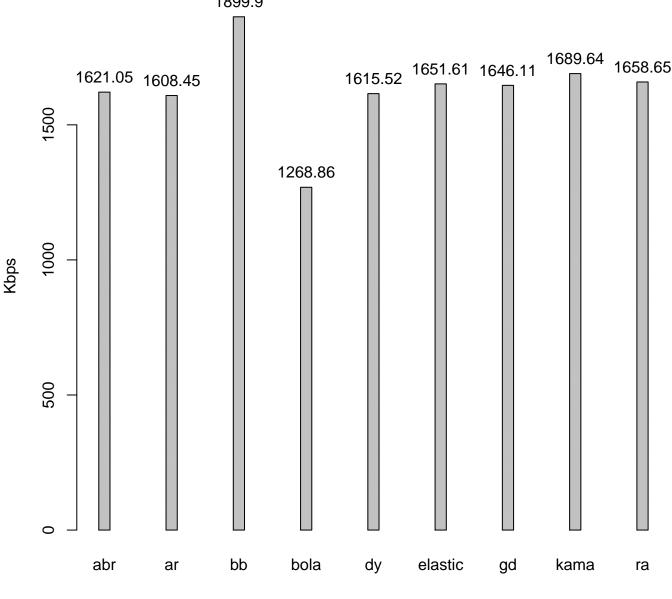


Network profile: p3 Sample: t5 Metric: Inefficiency Buffer: 30/60



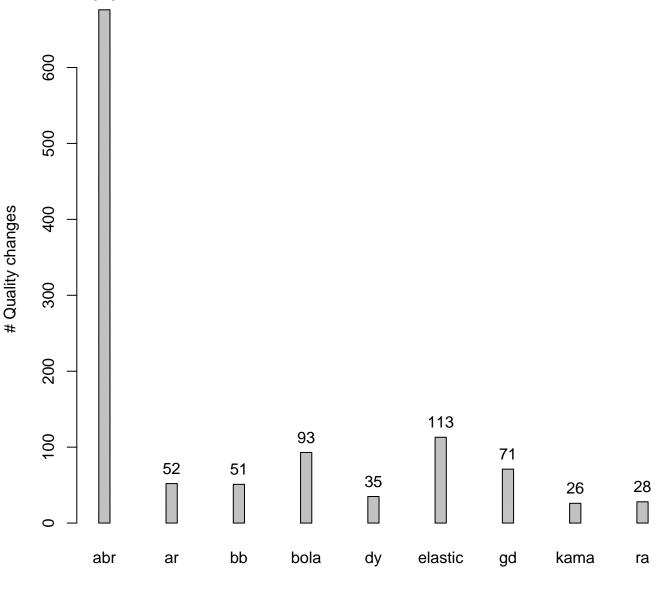
Network profile: p3 Sample: t5 Metric: # quality change **Buffer: 30/60** 34 30 25 24 22 22 20 20 20 # Quality changes 20 18 15 14 10 2 abr bola elastic kama bb dy gd ar ra

Network profile: p3 Sample: t6 Metric: Avg-Bitrate
Buffer: 30/60
1899.9

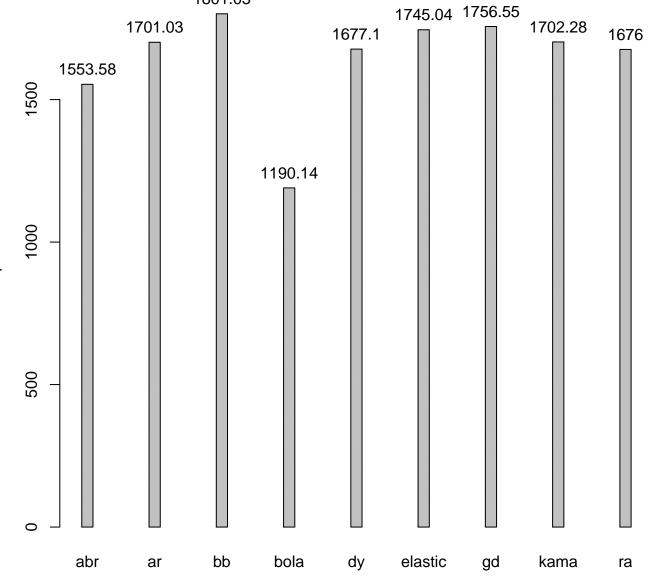


Network profile: p3 Sample: t6 Metric: Inefficiency **Buffer: 30/60** 0.385496 0.359381 0.34252 0.326815 0.299845 0.3 0.288861 0.264349 0.238885 0.208492 Inefficiency 0.1 elastic abr bb bola dy kama ar gd ra

Network profile: p3 Sample: t6 Metric: # quality change Buffer: 30/60



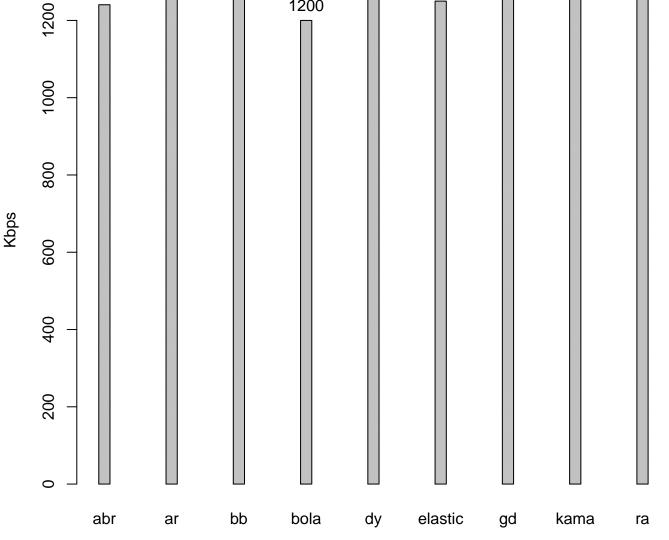
Network profile: p3 Sample: t7 Metric: Avg-Bitrate
Buffer: 30/60
1801.03



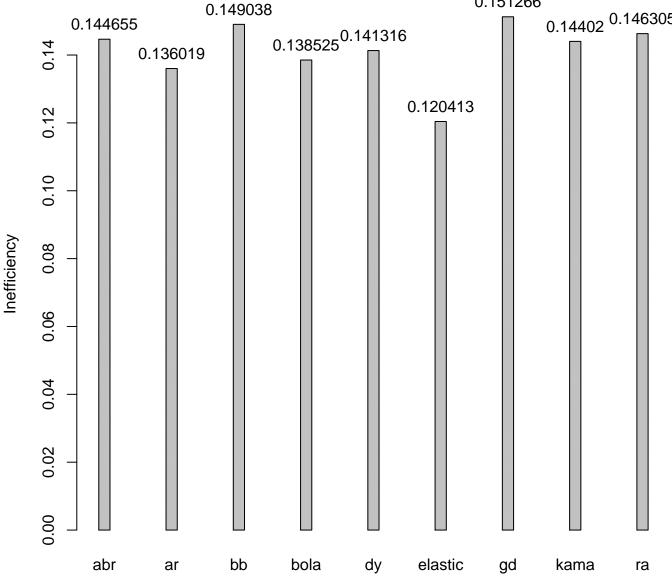
Network profile: p3 Sample: t7 Metric: Inefficiency Buffer: 30/60 0.445035 0.410874 0.361322 0.351976 0.283857 0.268983 $0.270182_{0.262959}$ Inefficiency elastic abr bb bola dy kama ar gd ra

Network profile: p3 Sample: t7 Metric: # quality change **Buffer: 30/60** 340 300 250 # Quality changes 200 150 102 100 81 50 32 29 29 29 27 23 elastic abr bola kama bb dy gd ar ra

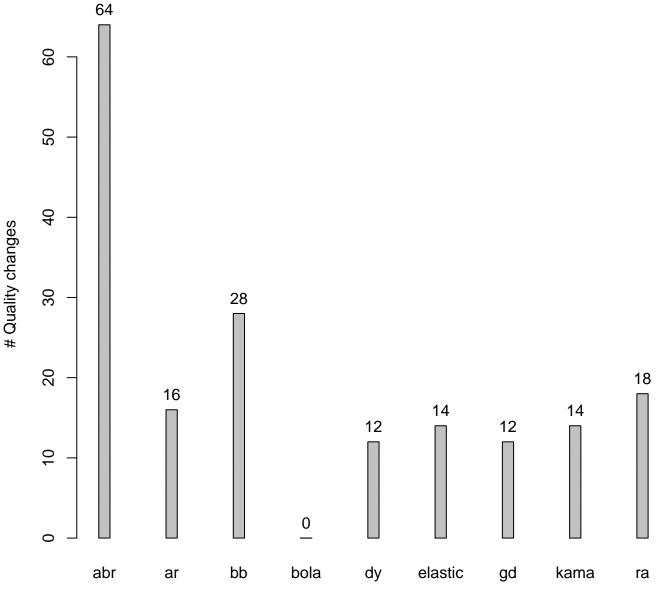
Network profile: p4 Sample: t1 Metric: Avg-Bitrate **Buffer: 30/60** 1328.44 1284.76 1308.21 1294.91 1288.4 1286.96 1249.98 1240.56 1200



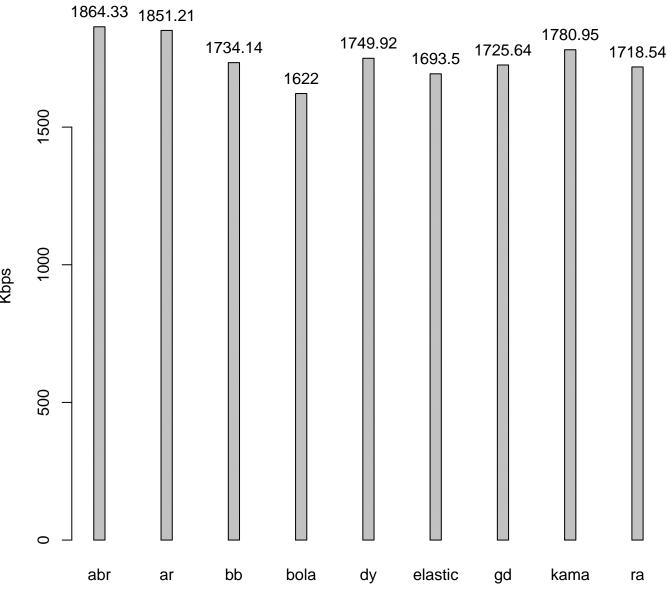
Network profile: p4 Sample: t1 Metric: Inefficiency
Buffer: 30/60
0.151266



Network profile: p4 Sample: t1 Metric: # quality change
Buffer: 30/60

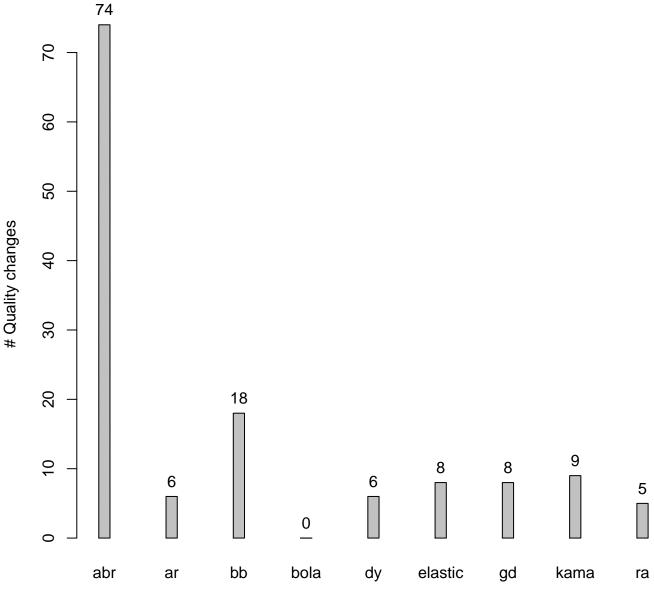


Network profile: p4 Sample: t2 Metric: Avg-Bitrate
Buffer: 30/60



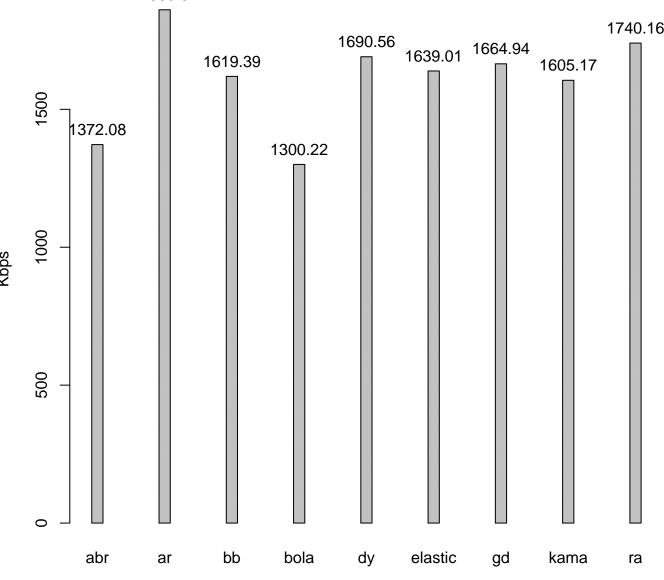
Network profile: p4 Sample: t2 Metric: Inefficiency **Buffer: 30/60** 0.233377 0.20 0.180725 0.164735 0.164884 0.148536 0.15 Inefficiency 0.101377 0.10 0.0924658 0.0788778 0.0483547 0.05 bola elastic abr bb dy gd kama ar ra

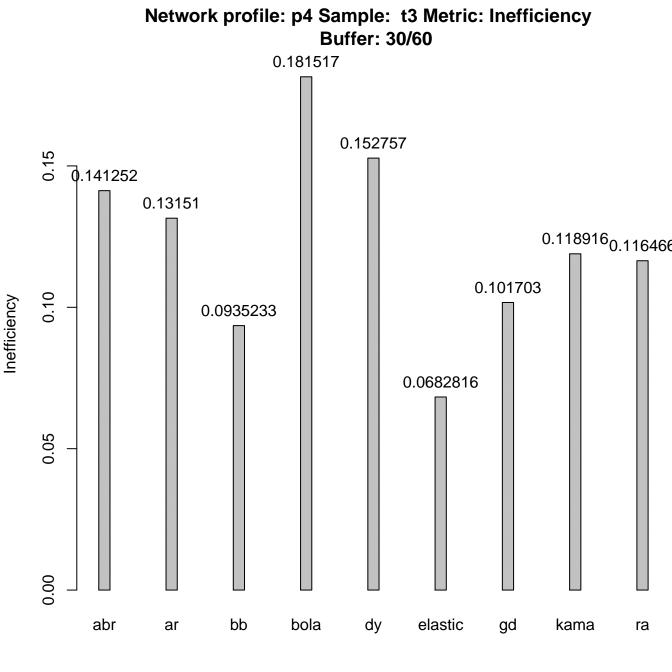
Network profile: p4 Sample: t2 Metric: # quality change Buffer: 30/60



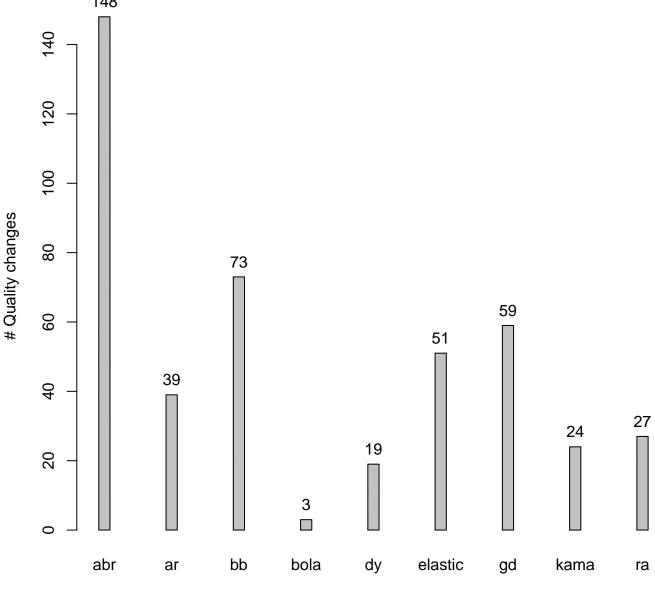
Network profile: p4 Sample: t3 Metric: Avg-Bitrate
Buffer: 30/60

1860.8





Network profile: p4 Sample: t3 Metric: # quality change Buffer: 30/60



Network profile: p4 Sample: t4 Metric: Avg-Bitrate **Buffer: 30/60** 1696.42 1664.33 1660.66 1600.41 1565.68 1532.13 1500 1397.47 1209.95 1143 500 bola elastic abr bb dy gd kama ar ra

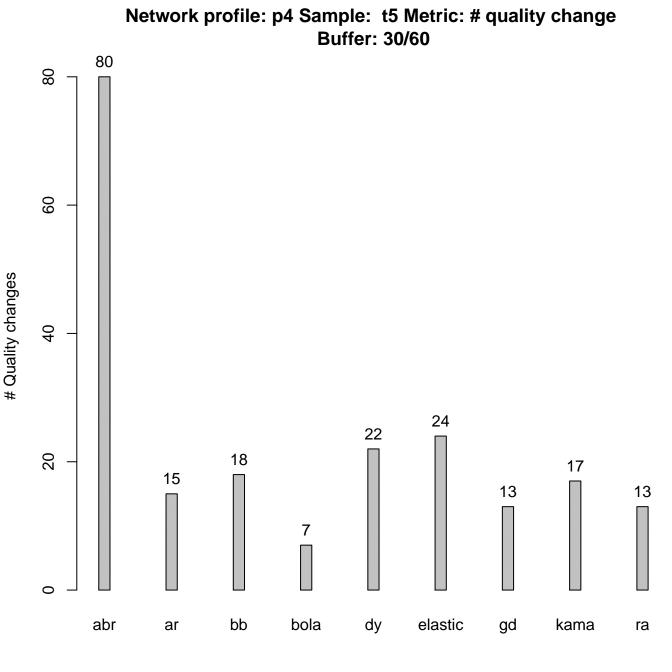
Network profile: p4 Sample: t4 Metric: Inefficiency Buffer: 30/60 0.194364 0.162612 _0.14664 0.142752 0.1330090.134147 0.115911 0.109617 Inefficiency 0.100572 0.10 0.05 bola elastic abr bb dy kama ar gd ra

Network profile: p4 Sample: t4 Metric: # quality change **Buffer: 30/60** 120 120 100 80 # Quality changes 9 47 44 39 38 40 32 31 29 20 elastic abr bb bola kama dy gd ar ra

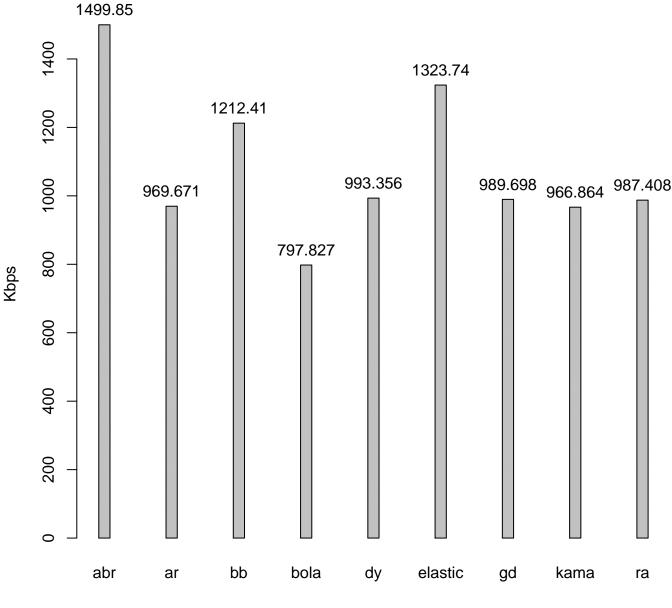
Buffer: 30/60 1078.41 1067.41 1053.8 1046.72 1023.35 1015.99 1000 932.158 898.773 800 900 575.438 400 200 bola elastic abr bb dy gd kama ar ra

Network profile: p4 Sample: t5 Metric: Avg-Bitrate

Network profile: p4 Sample: t5 Metric: Inefficiency **Buffer: 30/60** 0.394937 0.381472 0.350815 0.328583 0.286921 0.273871 0.244929^{0.250323</sub>0.256531} Inefficiency 0.1 elastic abr bb bola dy kama ar gd ra

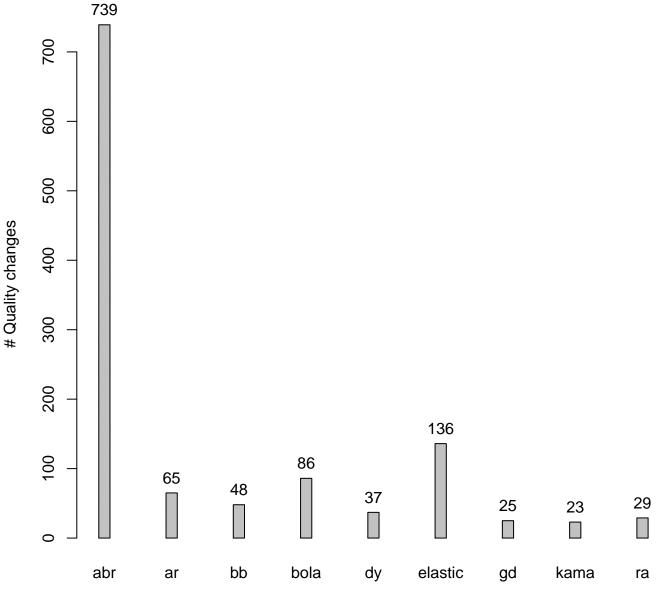


Network profile: p4 Sample: t6 Metric: Avg-Bitrate
Buffer: 30/60



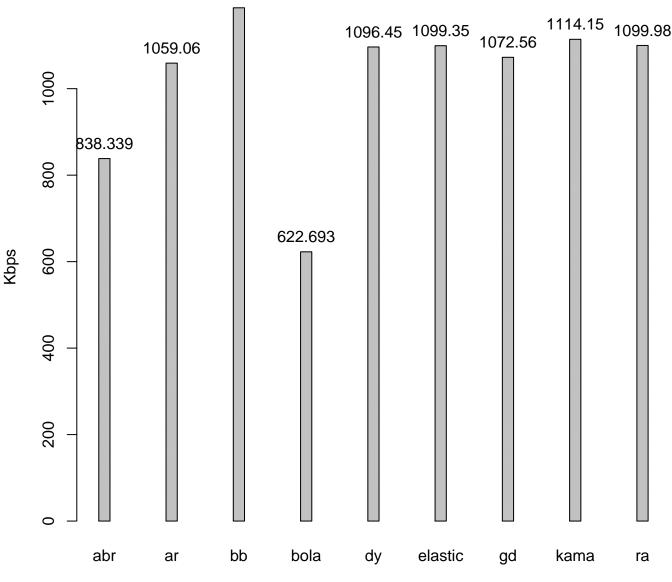
Network profile: p4 Sample: t6 Metric: Inefficiency Buffer: 30/60 0.399686 0.33999 0.302826 0.257864 0.26213 0.251993 0.264379 0.261905 0.230054 Inefficiency 0.2 elastic abr bb bola dy kama ar gd ra

Network profile: p4 Sample: t6 Metric: # quality change Buffer: 30/60



Network profile: p4 Sample: t7 Metric: Avg-Bitrate
Buffer: 30/60

1187.05



Network profile: p4 Sample: t7 Metric: Inefficiency **Buffer: 30/60** 0.488139 0.447946 0.396118 0.35023 0.346877 0.335756 0.3306 0.328453 0.310977 Inefficiency bola elastic abr bb dy kama ar gd ra

Network profile: p4 Sample: t7 Metric: # quality change Buffer: 30/60

