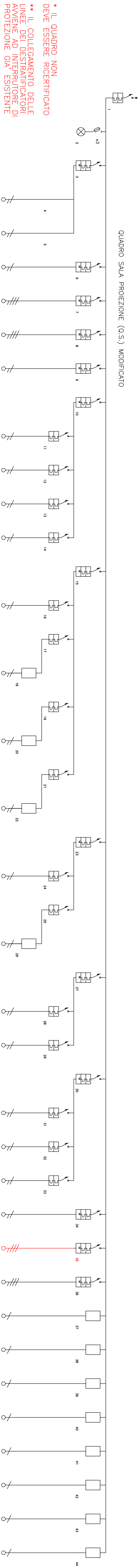


COMUNE DI
SANT'ANDREA FRIUS
(Provincia di Cagliari)

LAVORI DI COMPLETAMENTO
E ADEGUAMENTO
DEL TEATRO COMUNALE

"PROGETTO ESECUTIVO"

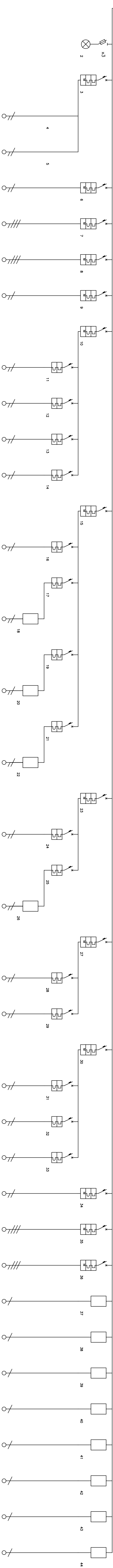
30	SOGA	DATA febbraio 2017	AGGIORNAMENTO
	SCHEMA QUADRO ELETTRICO SALA PROIEZIONE		
L. PROGETTA Dott. Ing. Gianni Caruso		L'AMMINISTRAZIONE COMUNALE	



★ IL QUADRO NON
DEVE ESSERE RICERTIFICATO

★★ IL COLLEGAMENTO DELLE
LINEE DEI DESTRIAFICATORI
AVVIENE AD INTERRUTORE DI
PROTEZIONE GIÀ ESISTENTE

QUADRO SALA PROIEZIONE (Q.S.)



Operator	Frequency (MHz)	Power (W)	Modulation	Bandwidth (MHz)	Spectrum Efficiency (bps/MHz)	Throughput (Mbps)	Latency (ms)	Reliability (%)	Coverage (km)	Interference (dBm)	Security (bits/sec)	Compliance (FCC/ETSI)	Performance Metrics													
													Throughput (Mbps)	Latency (ms)	Reliability (%)	Coverage (km)	Interference (dBm)	Security (bits/sec)	Compliance (FCC/ETSI)	Throughput (Mbps)	Latency (ms)	Reliability (%)	Coverage (km)	Interference (dBm)	Security (bits/sec)	Compliance (FCC/ETSI)
Operator A	900 MHz	100 W	QPSK	10 MHz	1.0	100	10	99.999	100	-100	1000	100%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	900 MHz	100 W	QPSK	10 MHz	1.0	100	10	99.999	100	-100	1000	100%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	900 MHz	100 W	QPSK	10 MHz	1.0	100	10	99.999	100	-100	1000	100%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator B	1800 MHz	200 W	QPSK	20 MHz	2.0	200	20	99.999	200	-100	2000	200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	1800 MHz	200 W	QPSK	20 MHz	2.0	200	20	99.999	200	-100	2000	200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	1800 MHz	200 W	QPSK	20 MHz	2.0	200	20	99.999	200	-100	2000	200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator C	2700 MHz	300 W	QPSK	30 MHz	3.0	300	30	99.999	300	-100	3000	300%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	2700 MHz	300 W	QPSK	30 MHz	3.0	300	30	99.999	300	-100	3000	300%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	2700 MHz	300 W	QPSK	30 MHz	3.0	300	30	99.999	300	-100	3000	300%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator D	3600 MHz	400 W	QPSK	40 MHz	4.0	400	40	99.999	400	-100	4000	400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	3600 MHz	400 W	QPSK	40 MHz	4.0	400	40	99.999	400	-100	4000	400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	3600 MHz	400 W	QPSK	40 MHz	4.0	400	40	99.999	400	-100	4000	400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator E	4500 MHz	500 W	QPSK	50 MHz	5.0	500	50	99.999	500	-100	5000	500%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	4500 MHz	500 W	QPSK	50 MHz	5.0	500	50	99.999	500	-100	5000	500%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	4500 MHz	500 W	QPSK	50 MHz	5.0	500	50	99.999	500	-100	5000	500%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator F	5400 MHz	600 W	QPSK	60 MHz	6.0	600	60	99.999	600	-100	6000	600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	5400 MHz	600 W	QPSK	60 MHz	6.0	600	60	99.999	600	-100	6000	600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	5400 MHz	600 W	QPSK	60 MHz	6.0	600	60	99.999	600	-100	6000	600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator G	6300 MHz	700 W	QPSK	70 MHz	7.0	700	70	99.999	700	-100	7000	700%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	6300 MHz	700 W	QPSK	70 MHz	7.0	700	70	99.999	700	-100	7000	700%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	6300 MHz	700 W	QPSK	70 MHz	7.0	700	70	99.999	700	-100	7000	700%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator H	7200 MHz	800 W	QPSK	80 MHz	8.0	800	80	99.999	800	-100	8000	800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	7200 MHz	800 W	QPSK	80 MHz	8.0	800	80	99.999	800	-100	8000	800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	7200 MHz	800 W	QPSK	80 MHz	8.0	800	80	99.999	800	-100	8000	800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator I	8100 MHz	900 W	QPSK	90 MHz	9.0	900	90	99.999	900	-100	9000	900%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	8100 MHz	900 W	QPSK	90 MHz	9.0	900	90	99.999	900	-100	9000	900%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	8100 MHz	900 W	QPSK	90 MHz	9.0	900	90	99.999	900	-100	9000	900%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator J	9000 MHz	1000 W	QPSK	100 MHz	10.0	1000	100	99.999	1000	-100	10000	1000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	9000 MHz	1000 W	QPSK	100 MHz	10.0	1000	100	99.999	1000	-100	10000	1000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	9000 MHz	1000 W	QPSK	100 MHz	10.0	1000	100	99.999	1000	-100	10000	1000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator K	10800 MHz	1200 W	QPSK	120 MHz	12.0	1200	120	99.999	1200	-100	12000	1200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	10800 MHz	1200 W	QPSK	120 MHz	12.0	1200	120	99.999	1200	-100	12000	1200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	10800 MHz	1200 W	QPSK	120 MHz	12.0	1200	120	99.999	1200	-100	12000	1200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator L	12600 MHz	1400 W	QPSK	140 MHz	14.0	1400	140	99.999	1400	-100	14000	1400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	12600 MHz	1400 W	QPSK	140 MHz	14.0	1400	140	99.999	1400	-100	14000	1400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	12600 MHz	1400 W	QPSK	140 MHz	14.0	1400	140	99.999	1400	-100	14000	1400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator M	14400 MHz	1600 W	QPSK	160 MHz	16.0	1600	160	99.999	1600	-100	16000	1600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	14400 MHz	1600 W	QPSK	160 MHz	16.0	1600	160	99.999	1600	-100	16000	1600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	14400 MHz	1600 W	QPSK	160 MHz	16.0	1600	160	99.999	1600	-100	16000	1600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator N	16200 MHz	1800 W	QPSK	180 MHz	18.0	1800	180	99.999	1800	-100	18000	1800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	16200 MHz	1800 W	QPSK	180 MHz	18.0	1800	180	99.999	1800	-100	18000	1800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	16200 MHz	1800 W	QPSK	180 MHz	18.0	1800	180	99.999	1800	-100	18000	1800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator O	18000 MHz	2000 W	QPSK	200 MHz	20.0	2000	200	99.999	2000	-100	20000	2000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	18000 MHz	2000 W	QPSK	200 MHz	20.0	2000	200	99.999	2000	-100	20000	2000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	18000 MHz	2000 W	QPSK	200 MHz	20.0	2000	200	99.999	2000	-100	20000	2000%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator P	21600 MHz	2400 W	QPSK	240 MHz	24.0	2400	240	99.999	2400	-100	24000	2400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	21600 MHz	2400 W	QPSK	240 MHz	24.0	2400	240	99.999	2400	-100	24000	2400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	21600 MHz	2400 W	QPSK	240 MHz	24.0	2400	240	99.999	2400	-100	24000	2400%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator Q	25200 MHz	2800 W	QPSK	280 MHz	28.0	2800	280	99.999	2800	-100	28000	2800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	25200 MHz	2800 W	QPSK	280 MHz	28.0	2800	280	99.999	2800	-100	28000	2800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	25200 MHz	2800 W	QPSK	280 MHz	28.0	2800	280	99.999	2800	-100	28000	2800%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator R	28800 MHz	3200 W	QPSK	320 MHz	32.0	3200	320	99.999	3200	-100	32000	3200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	28800 MHz	3200 W	QPSK	320 MHz	32.0	3200	320	99.999	3200	-100	32000	3200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	28800 MHz	3200 W	QPSK	320 MHz	32.0	3200	320	99.999	3200	-100	32000	3200%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator S	32400 MHz	3600 W	QPSK	360 MHz	36.0	3600	360	99.999	3600	-100	36000	3600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	32400 MHz	3600 W	QPSK	360 MHz	36.0	3600	360	99.999	3600	-100	36000	3600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
	32400 MHz	3600 W	QPSK	360 MHz	36.0	3600	360	99.999	3600	-100	36000	3600%	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance	Throughput	Latency	Reliability	Coverage	Interference	Security	Compliance
Operator T	36000 MHz	4000 W	QPSK	400 MHz	40.0	4000	400	99.999	4000	-100																

Simulation box	LIGO O3		LIGO O4		LIGO O5		LIGO O6		LIGO O7		LIGO O8		LIGO O9		LIGO O10		LIGO O11		LIGO O12		LIGO O13		LIGO O14		LIGO O15		LIGO O16		LIGO O17		LIGO O18		LIGO O19		LIGO O20		LIGO O21		LIGO O22		LIGO O23		LIGO O24		LIGO O25		LIGO O26		LIGO O27		LIGO O28		LIGO O29		LIGO O30		LIGO O31		LIGO O32		LIGO O33		LIGO O34		LIGO O35		LIGO O36		LIGO O37		LIGO O38		LIGO O39		LIGO O40		LIGO O41		LIGO O42		LIGO O43		LIGO O44		LIGO O45		LIGO O46		LIGO O47		LIGO O48		LIGO O49		LIGO O50		LIGO O51		LIGO O52		LIGO O53		LIGO O54		LIGO O55		LIGO O56		LIGO O57		LIGO O58		LIGO O59		LIGO O60		LIGO O61		LIGO O62		LIGO O63		LIGO O64		LIGO O65		LIGO O66		LIGO O67		LIGO O68		LIGO O69		LIGO O70		LIGO O71		LIGO O72		LIGO O73		LIGO O74		LIGO O75		LIGO O76		LIGO O77		LIGO O78		LIGO O79		LIGO O80		LIGO O81		LIGO O82		LIGO O83		LIGO O84		LIGO O85		LIGO O86		LIGO O87		LIGO O88		LIGO O89		LIGO O90		LIGO O91		LIGO O92		LIGO O93		LIGO O94		LIGO O95		LIGO O96		LIGO O97		LIGO O98		LIGO O99		LIGO O100		LIGO O101		LIGO O102		LIGO O103		LIGO O104		LIGO O105		LIGO O106		LIGO O107		LIGO O108		LIGO O109		LIGO O110		LIGO O111		LIGO O112		LIGO O113		LIGO O114		LIGO O115		LIGO O116		LIGO O117		LIGO O118		LIGO O119		LIGO O120		LIGO O121		LIGO O122		LIGO O123		LIGO O124		LIGO O125		LIGO O126		LIGO O127		LIGO O128		LIGO O129		LIGO O130		LIGO O131		LIGO O132		LIGO O133		LIGO O134		LIGO O135		LIGO O136		LIGO O137		LIGO O138		LIGO O139		LIGO O140		LIGO O141		LIGO O142		LIGO O143		LIGO O144		LIGO O145		LIGO O146		LIGO O147		LIGO O148		LIGO O149		LIGO O150		LIGO O151		LIGO O152		LIGO O153		LIGO O154		LIGO O155		LIGO O156		LIGO O157		LIGO O158		LIGO O159		LIGO O160		LIGO O161		LIGO O162		LIGO O163		LIGO O164		LIGO O165		LIGO O166		LIGO O167		LIGO O168		LIGO O169		LIGO O170		LIGO O171		LIGO O172		LIGO O173		LIGO O174		LIGO O175		LIGO O176		LIGO O177		LIGO O178		LIGO O179		LIGO O180		LIGO O181		LIGO O182		LIGO O183		LIGO O184		LIGO O185		LIGO O186		LIGO O187		LIGO O188		LIGO O189		LIGO O190		LIGO O191		LIGO O192		LIGO O193		LIGO O194		LIGO O195		LIGO O196		LIGO O197		LIGO O198		LIGO O199		LIGO O200		LIGO O201		LIGO O202		LIGO O203		LIGO O204		LIGO O205		LIGO O206		LIGO O207		LIGO O208		LIGO O209		LIGO O210		LIGO O211		LIGO O212		LIGO O213		LIGO O214		LIGO O215		LIGO O216		LIGO O217		LIGO O218		LIGO O219		LIGO O220		LIGO O221		LIGO O222		LIGO O223		LIGO O224		LIGO O225		LIGO O226		LIGO O227		LIGO O228		LIGO O229		LIGO O230		LIGO O231		LIGO O232		LIGO O233		LIGO O234		LIGO O235		LIGO O236		LIGO O237		LIGO O238		LIGO O239		LIGO O240		LIGO O241		LIGO O242		LIGO O243		LIGO O244		LIGO O245		LIGO O246		LIGO O247		LIGO O248		LIGO O249		LIGO O250		LIGO O251		LIGO O252		LIGO O253		LIGO O254		LIGO O255		LIGO O256		LIGO O257		LIGO O258		LIGO O259		LIGO O260		LIGO O261		LIGO O262		LIGO O263		LIGO O264		LIGO O265		LIGO O266		LIGO O267		LIGO O268		LIGO O269		LIGO O270		LIGO O271		LIGO O272		LIGO O273		LIGO O274		LIGO O275		LIGO O276		LIGO O277		LIGO O278		LIGO O279		LIGO O280		LIGO O281		LIGO O282		LIGO O283		LIGO O284		LIGO O285		LIGO O286		LIGO O287		LIGO O288		LIGO O289		LIGO O290		LIGO O291		LIGO O292		LIGO O293		LIGO O294		LIGO O295		LIGO O296		LIGO O297		LIGO O298		LIGO O299		LIGO O300		LIGO O301		LIGO O302		LIGO O303		LIGO O304		LIGO O305		LIGO O306		LIGO O307		LIGO O308		LIGO O309		LIGO O310		LIGO O311		LIGO O312		LIGO O313		LIGO O314		LIGO O315		LIGO O316		LIGO O317		LIGO O318		LIGO O319		LIGO O320		LIGO O321		LIGO O322		LIGO O323		LIGO O324		LIGO O325		LIGO O326		LIGO O327		LIGO O328		LIGO O329		LIGO O330		LIGO O331		LIGO O332		LIGO O333		LIGO O334		LIGO O335		LIGO O336		LIGO O337		LIGO O338		LIGO O339		LIGO O340		LIGO O341		LIGO O342		LIGO O343		LIGO O344		LIGO O345		LIGO O346		LIGO O347		LIGO O348		LIGO O349		LIGO O350		LIGO O351		LIGO O352		LIGO O353		LIGO O354		LIGO O355		LIGO O356		LIGO O357		LIGO O358		LIGO O359		LIGO O360		LIGO O361		LIGO O362		LIGO O363		LIGO O364		LIGO O365		LIGO O366		LIGO O367		LIGO O368		LIGO O369		LIGO O370		LIGO O371		LIGO O372		LIGO O373		LIGO O374		LIGO O375		LIGO O376		LIGO O377		LIGO O378		LIGO O379		LIGO O380		LIGO O381		LIGO O382		LIGO O383		LIGO O384		LIGO O385		LIGO O386		LIGO O387		LIGO O388		LIGO O389		LIGO O390		LIGO O391		LIGO O392		LIGO O393		LIGO O394		LIGO O395		LIGO O396		LIGO O397		LIGO O398		LIGO O399		LIGO O400		LIGO O401		LIGO O402		LIGO O403		LIGO O404		LIGO O405		LIGO O406		LIGO O407		LIGO O408		LIGO O409		LIGO O410		LIGO O411		LIGO O412		LIGO O413		LIGO O414		LIGO O415		LIGO O416		LIGO O417		LIGO O418		LIGO O419		LIGO O420		LIGO O421		LIGO O422		LIGO O423		LIGO O424		LIGO O425		LIGO O426		LIGO O427		LIGO O428		LIGO O429		LIGO O430		LIGO O431		LIGO O432		LIGO O433		LIGO O434		LIGO O435		LIGO O436		LIGO O437		LIGO O438		LIGO O439		LIGO O440		LIGO O441		LIGO O442		LIGO O443		LIGO O444		LIGO O445		LIGO O446		LIGO O447		LIGO O448		LIGO O449		LIGO O450		LIGO O451		LIGO O452		LIGO O453		LIGO O454		LIGO O455		LIGO O456		LIGO O457		LIGO O458		LIGO O459		LIGO O460		LIGO O461		LIGO O462		LIGO O463		LIGO O464		LIGO O465		LIGO O466		LIGO O467		LIGO O468		LIGO O469		LIGO O470		LIGO O471		LIGO O472		LIGO O473		LIGO O474		LIGO O475		LIGO O476		LIGO O477		LIGO O478		LIGO O479		LIGO O480		LIGO O481		LIGO O482		LIGO O483		LIGO O484		LIGO O485		LIGO O486		LIGO O487		LIGO O488		LIGO O489		LIGO O490		LIGO O491		LIGO O492		LIGO O493		LIGO O494		LIGO O495		LIGO O496		LIGO O497		LIGO O498		LIGO O499		LIGO O500		LIGO O501		LIGO O502		LIGO O503		LIGO O504		LIGO O505		LIGO O506		LIGO O507		LIGO O508		LIGO O509		LIGO O510		LIGO O511		LIGO O512		LIGO O513		LIGO O514		LIGO O515		LIGO O516		LIGO O517		LIGO O518		LIGO O519		LIGO O520		LIGO O521		LIGO O522		LIGO O523		LIGO O524		LIGO O525		LIGO O526		LIGO O527		LIGO O528		LIGO O529		LIGO O530		LIGO O531		LIGO O532		LIGO O533		LIGO O534		LIGO O535		LIGO O536		LIGO O537		LIGO O538		LIGO O539		LIGO O540		LIGO O541		LIGO O542		LIGO O543		LIGO O544		LIGO O545		LIGO O546		LIGO O547		LIGO O548		LIGO O549		LIGO O550		LIGO O551		LIGO O552		LIGO O553		LIGO O554		LIGO O555		LIGO 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O647		LIGO O648		LIGO O649		LIGO O650		LIGO O651		LIGO O652		LIGO O653		LIGO O654		LIGO O655		LIGO O656		LIGO O657		LIGO O658		LIGO O659		LIGO O660		LIGO O661		LIGO O662		LIGO O663		LIGO O664		LIGO O665		LIGO O666		LIGO O667		LIGO O668		LIGO O669		LIGO O670		LIGO O671		LIGO O672		LIGO O673		LIGO O674		LIGO O675		LIGO O676		LIGO O677		LIGO O678		LIGO O679		LIGO O680		LIGO O681		LIGO O682		LIGO O683		LIGO O684		LIGO O685		LIGO O686		LIGO O687		LIGO O688		LIGO O689		LIGO O690		LIGO O691		LIGO O692		LIGO O693		LIGO O694		LIGO O695		LIGO O696		LIGO O697		LIGO O698		LIGO O699		LIGO O700		LIGO O701		LIGO O702		LIGO O703		LIGO O704		LIGO O705		LIGO O706		LIGO O707		LIGO O708		LIGO O709		LIGO O710		LIGO O711		LIGO O712		LIGO O713		LIGO O714		LIGO O715		LIGO O716		LIGO O717		LIGO O718		LIGO O719		LIGO O720		LIGO O721		LIGO O722		LIGO O723		LIGO O724		LIGO O725		LIGO O726		LIGO O727		LIGO O728		LIGO O729		LIGO O730		LIGO O731		LIGO O732		LIGO O733		LIGO O734		LIGO O735		LIGO O736		LIGO O737		LIGO O738		LIGO O739		LIGO O740		LIGO O741		LIGO O742		LIGO O743		LIGO O744		LIGO O745		LIGO O746		LIGO O747		LIGO O748		LIGO O749		LIGO O750		LIGO O751		LIGO O752		LIGO O753		LIGO O754		LIGO O755		LIGO O756		LIGO O757		LIGO O758		LIGO O759		LIGO O760		LIGO O761		LIGO O762		LIGO O763		LIGO O764		LIGO O765		LIGO O766		LIGO O767		LIGO O768		LIGO O769		LIGO O770		LIGO O771		LIGO O772		LIGO O773		LIGO O774		LIGO O775		LIGO O776		LIGO O777		LIGO O778		LIGO O779		LIGO O780		LIGO O781		LIGO O782		LIGO O783		LIGO O784		LIGO O785		LIGO O786		LIGO O787		LIGO O788		LIGO O789		LIGO O790		LIGO O791		LIGO O792		LIGO O793		LIGO O794		LIGO O795		LIGO O796		LIGO O797		LIGO O798		LIGO O799		LIGO O800		LIGO O801		LIGO O802		LIGO O803		LIGO O804		LIGO O805		LIGO O806		LIGO O807		LIGO O808		LIGO O809		LIGO O810		LIGO O811		LIGO O812		LIGO O813		LIGO O814		LIGO O815		LIGO O816		LIGO O817		LIGO O818		LIGO O819		LIGO O820		LIGO O821		LIGO O822		LIGO O823		LIGO O824		LIGO O825		LIGO O826		LIGO O827		LIGO O828		LIGO O829		LIGO O830		LIGO O831		LIGO O832		LIGO O833		LIGO O834		LIGO O835		LIGO O836		LIGO O837		LIGO O838		LIGO O839		LIGO O840		LIGO O841		LIGO O842		LIGO O843		LIGO O844		LIGO O845		LIGO O846		LIGO O847		LIGO O848		LIGO O849		LIGO O850		LIGO O851		LIGO O852		LIGO O853		LIGO O854		LIGO O855		LIGO O856		LIGO O857		LIGO O858		LIGO O859		LIGO O860		LIGO O861		LIGO O862		LIGO O863		LIGO O864		LIGO O865		LIGO O866		LIGO O867		LIGO O868		LIGO O869		LIGO O870		LIGO O871		LIGO O872		LIGO O873		LIGO O874		LIGO O875		LIGO O876		LIGO O877		LIGO O878		LIGO O879		LIGO O880		LIGO O881		LIGO O882		LIGO O883		LIGO O884		LIGO O885		LIGO O886		LIGO O887		LIGO O888		LIGO O889		LIGO O890		LIGO O891		LIGO O892		LIGO O893	
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