

! " # \$ % & ' (% #) * + , * - , . / *) . 0 +

! " # \$ % & ' () %

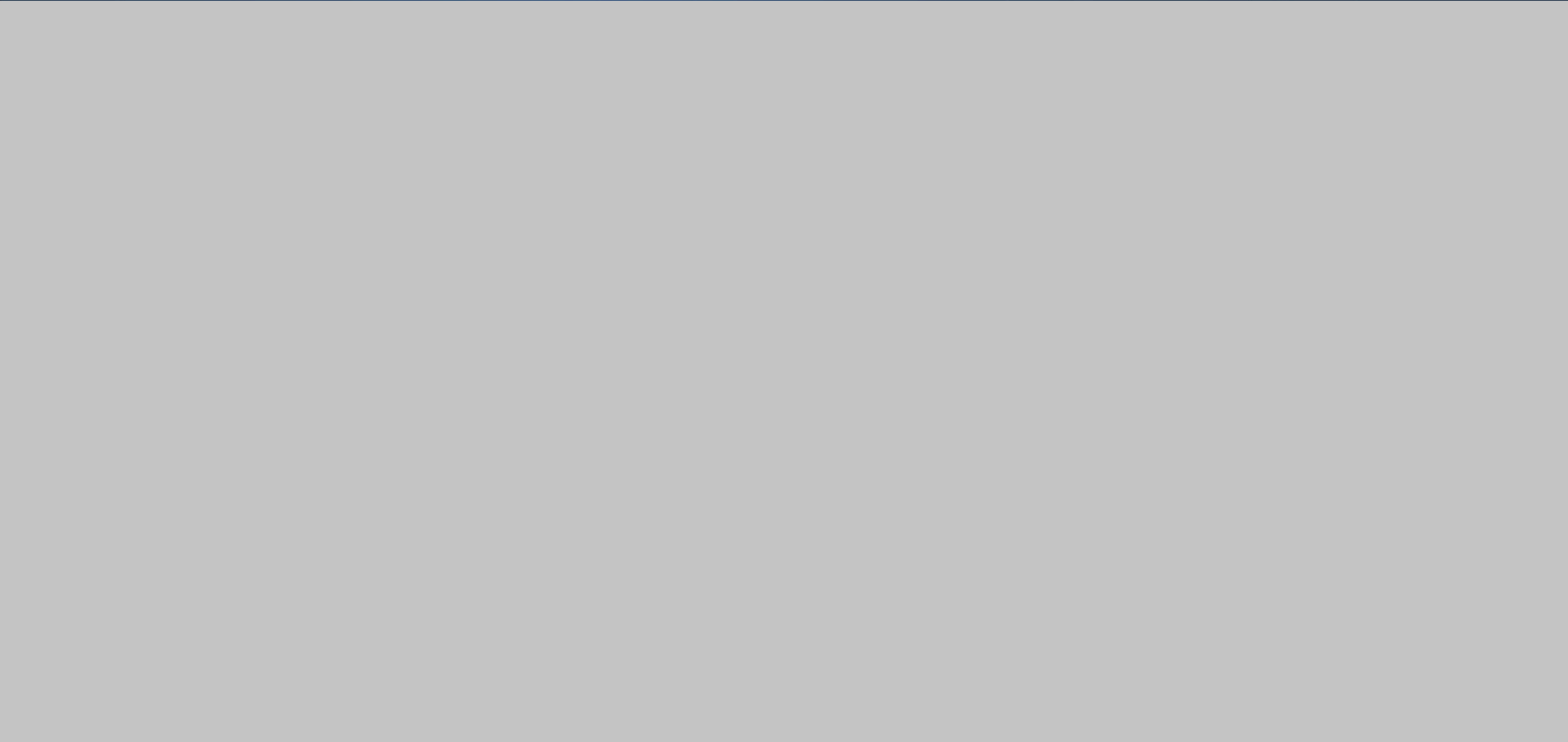
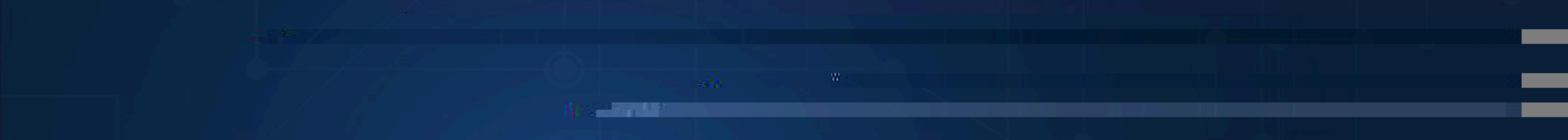
& * + , - . (/ % 0 (1 - / " . \$ % 2 " 3 " 4 " *) 5 % 6) 7 * / + 8 . " *) % 9 (1 ') * # * : \$ % ! 8 ;

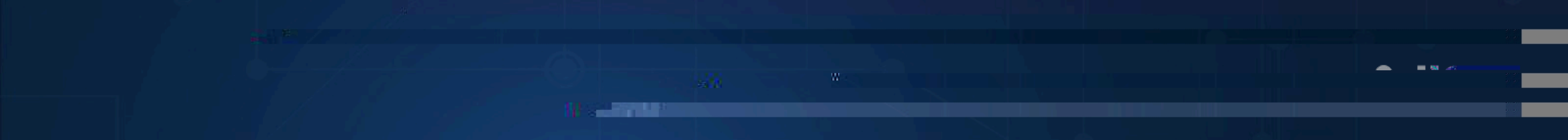
< 8 . " *) 8 # % 6) 4 . " . - . (% * 7 % 0 . 8) = 8 / = 4 % 8) = % 9 (1 ') * # * : \$ % > < 6 0 9 ?

98-1*8: %:)-0*%+%&(75'3508'/*(%

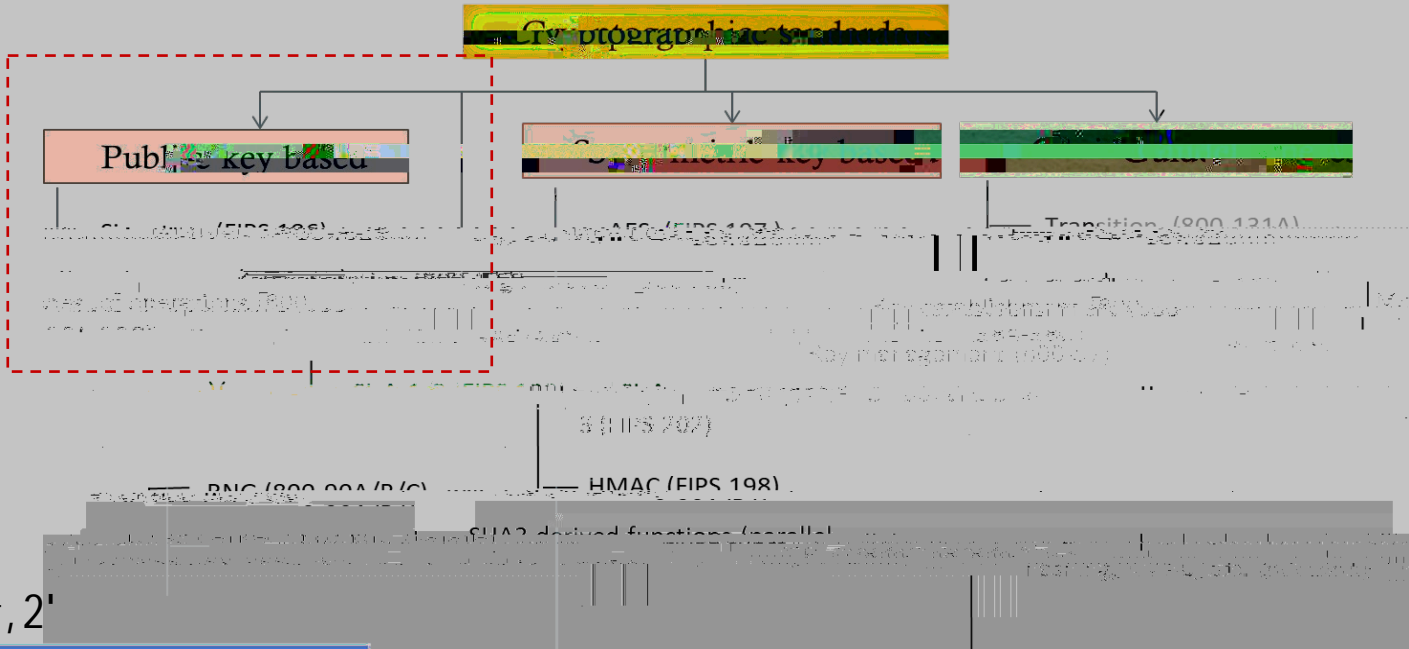
- 50%'-%&4"(\$6'#*'7481(&92%6'&"67\$#: ", 706'(-'8, -%. '#)'
0, ". '7"#81%+', --4 + 7\$(#) -'*#"&1, --(&'&# + 74\$%"-;'
%<: <,'()\$%:%""*, &\$#"(=, \$(#)'*#">?@',). '(-&""\$%'
1#: , "(\$0 + '*#"AB',). 'CDA?@'
- E4,)\$4 + '&# + 74\$%"-'&0,):%. '30, '\$3%'0, /%'
8%1(%/%. ', 8#4\$'\$0%'0, ".)%--
- !"#%&'()#*+, &'-%/0#1*2.&'3*.-&4#*45#5-)2'6.6#&, '*'-%/#
7'&8+6/)#2*4#86#)&+965#8"#: ; *4.; /#2&/7; .6')#4#
7&+"4&/-*#.-/6
- E4,)\$4 + '&# + 74\$(): ', 1-#'(+ 7, &\$%. '-%&4"(\$6'-\$"%): \$0'
#*' -6 + + %\$"(&'2%6'8, -%. '&"67\$#: ", 706', 1: #"(\$0 + -'86'
F"#/%"G-', 1: #"(\$0 + 'H' + ,), : %, 81%'86'())&"% , -(): '2%6'
-(%'('*')%&%-- , "6







-
-



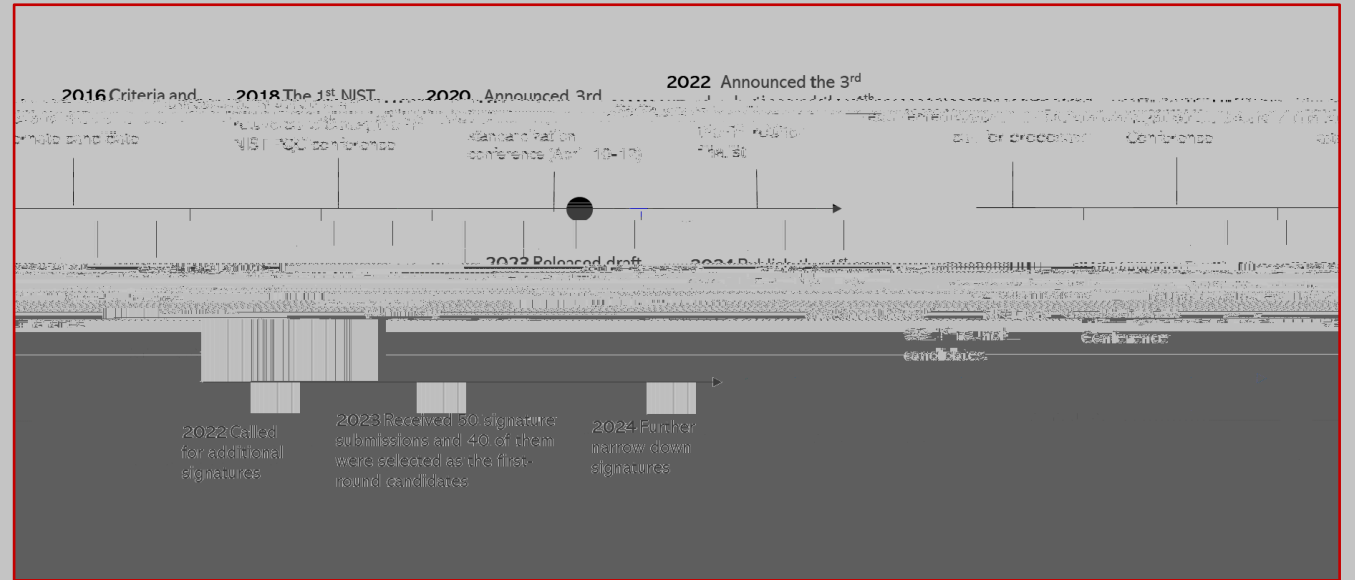
!"!#\$%&'(!)*(+!,-#'%'%#-!#&.!/0#&(01!#((# , 2'

Level	Strength by Designation
I	At least as hard to break as AES-128 (exhaustive key search)
II	At least as hard to break as AES-256 (collision search)
III	At least as hard to break as AES-256 (exhaustive key search)
IV	At least as hard to break as SHA-256 (collision search)
V	At least as hard to break as AES-256 (exhaustive key search)

3* 1 40(#(%* &#-!56' *05, 6'!' +*0-.!)6! 1 6#' 056. !
 0' %&\$!#!7#5% (8!*9! 1 6(5% ')

!" #"

! "#\$%&9&#* -12- '23%4%C/=53* +153%-12%\$/: 5=15

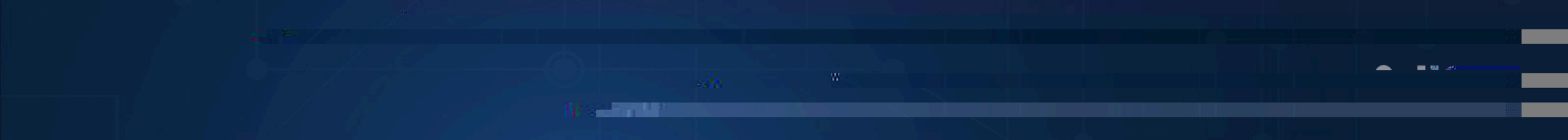


&8''51*%#* - *83

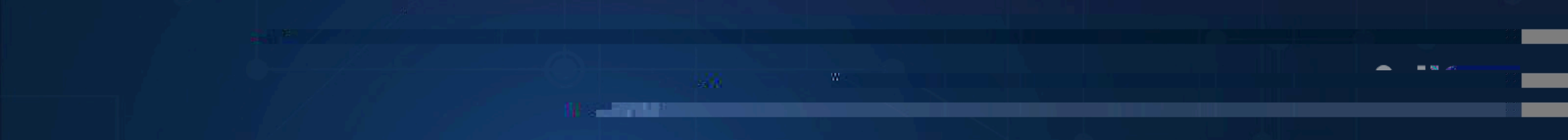
- \$6+62.65#*+, &'-.%/)#*'6#)762-1-65#-4#5'*1.#<=>\$#*45#2*+65#1&'#7;8+2#2&/ /64.)
 - :+6!56,6%76.!40)-%!, *116&('!#56!4*' (6.!#(!; <=:!>6)'%(6!0&.65!6#, +!*9!(+6!.5#9(!?<@=
 - ; <=:!(6#1!%!#, (%76-8!>*52%&\$!*&!(+6!56'*-0(%*&'!#&.!.6,%%*&'!9*5!(+6!9%&#-!40)-%#(%*&!
 - A#B*5!.6,%%*&'!+#76!)66&!456'6&(6.!#(!(+6!C !; <=:!@D3!=(#&. #5.%E#(%*&!3*&9656&,6!#&. !9*--* >6.!04!%&!4/,F9*501
- ?=\$@#7+*4)#.&#/ *A6#.%6#B #' &; 45#)6+62.-&4#-4#CDCB
- ?=\$@#2*+65#1&'#*55-.-&4*#)-, 4*.; '6)#-4#CDCC#.E*+; *.6#,646'*+E7;'7&)6#)-, 4*.; '6)#8*)65#&4#5-96')-1-65#/ *.%#7'&8+6/)
 - 30556&(-8&!H!!, #&. % # (6'!#56!0&.65!, * &' % 65#(%*&
 - =*16!, #&. % # (6'!>656!456'6&(6.!)8!4*' (65'!#(!(+6!C !; <=:!@D3!=(#&. #5.%E#(%*&!3*&9656&,6

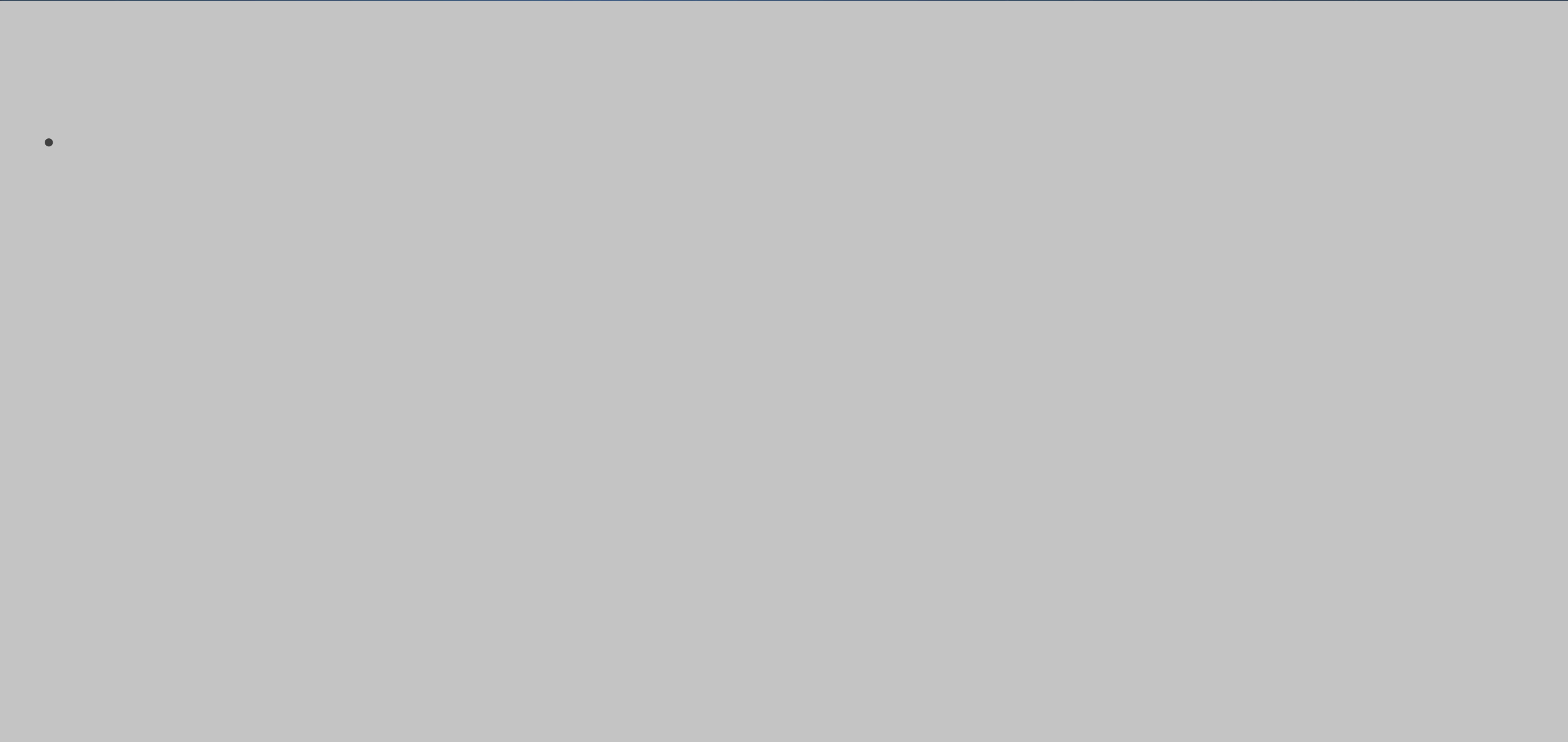
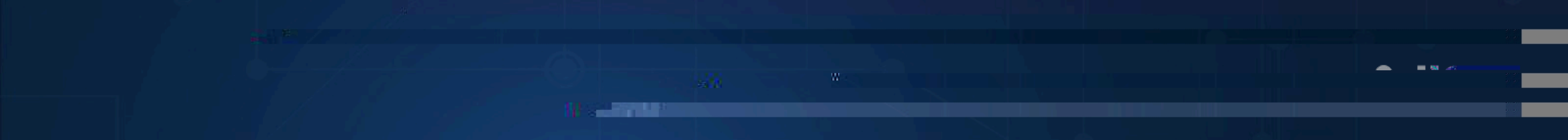
=6-6, (6.!J-\$*5%(+1'!#&. !K5#9(!?<@=

-
-

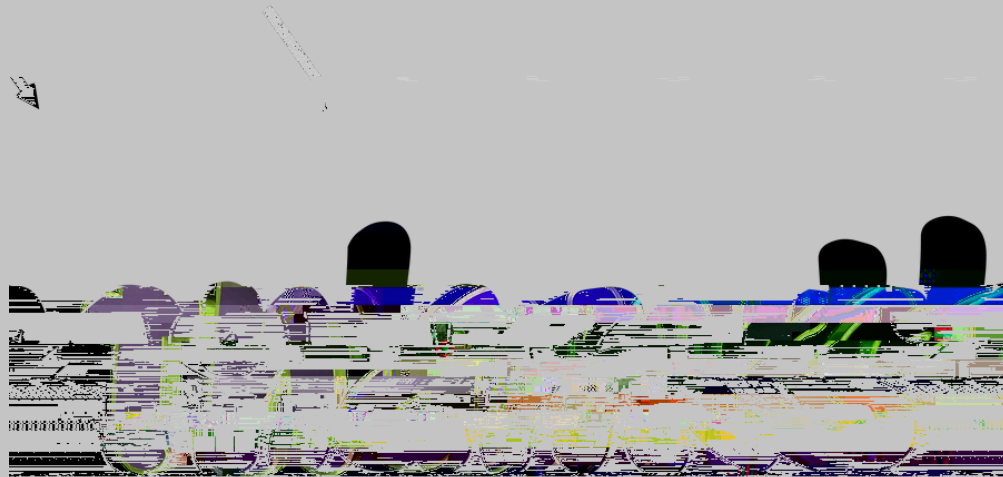


- D"67\$#: ", 70(&'-\$,) . , ". -' + 4-\$'. %, 1'3(\$0'
 -
 -
- 50%! ED'\$",)-(\$(#)'(-'8%6#). 'J4,)\$4 + '/41)%", 81%'\$#'J4,)\$4 + '"%(-\$,)&%
 -
-





! "#\$%&' " (\$)#*) (+*, --. *%) -*/&" . -"+%&. -*0&"*/#, -"+-/1"2%#
! "#\$%&' " (\$)2/*3-4-5(. %*61(. %1 7*! &7\$1%- "+*8! 36! 9*: 244*
/(%("+%&\$)2/(44#*, "-(; *%) -*: -44<=-\$4&#-=\$*1, 42/<; -#*/"#\$\$%&+#+% - 7 +
>?@A*) (+*, --. *=-5-4&\$2. ' *B6! *+%(. = ("=+*0&"*/#, -"+-/1"2%#* (\$\$42/(%2&. +



A, *.B71).<C@.(-#+=#*=4D#-4, +
@9' 2E., 3-[.FFF6+4\(-G: , HI%J2*0%- , .](#)
14: +.3%.>, *. -9' .%J2K>, *3\$.>, *.#++ , 3+2' \$' +-(.L.=4(23((4, +
@, +-#2-.3(.#-M.[%J2K2, \\$\\$' +-\(N+4\(-G: , H.](#)