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Ministero delle infrastrutture e dei trasporti

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H OH VFHOW SURJHWWDOH GHO7LQGXVWULD FKH FRQWEXLVFRQ D JDUDQWH OD SHUH OEDV GHOWWUR
UR O7HIIHWR LQHVDP H % D 4
,9, , ! -
' (' . # $' %#-' #%#! / / " 3 $%# ' $-
9 % ## # # ' *
±? ± # D
, # ## # , # 4
,QUDJLRQH GLVDQD] LRQL LIDWRULFDXVDQHG LUHDWWLYLP SDWWSRWWQ] LDQSUHVLQHVP H SHUO7DQDOLGHOOD FRP SR
(%42 4 =)4

$ 7 :

. # $' %#/ " *' --		! -- "#&! +1! (#	/ ! --#/ -' $. # (#
/ 4	# $ ## # $ $	: % % $	: %
		! 6 $	# 6 ' % # '
/ 4	: , # $ 0 , #	# ,	

/ 7KVR GHOVXRQR q XQ FRQFHWWR FRQGLVWR P D GLVWLQWR GD TXHOOR GLFRSHUWXUD GHOVXRQR

6HFRQGR TXDQWR USRUWDWR GD ,635$ QHO7LQGLHRH UDSSRUWR ³&RQVXP R GLVXRQR GLQDP LFKH WMULWRUDQ
, # ´ S % % $
% % # * % #
I % , -- / . , %
LQWUD] LRQL WD O7XRP R H OD FRSHUWXUD GHOVXRQR H FRVWWXLVFH TXLQGL XQD GHVFUL] LRQH GL FRP H OLVXRQR YHQJD
, ' * 4

/ DGLUHWWWD &(GHILQLVFH O7XRP GHOVXRQR FRP H XQD FDSVLLFD] LRQH GHOWULWRUR LQ EDVH DOOD GLP HQVLRQH
% # # % 4 6
% , # ,

* % # $
% 4
" , # # 6 ' % # ' $
YDUD] LRQLSHUP DQHQWH GHOVXRQR RYYHURGDOFRQVXP R GLVXRQR GD UFDGXWD DOVXRQR GLSRVWHL
6 , # , , , # , $
4
3HUTXDQWR FRQFHUQH O7DQDOLGHO ILVFD ULVXOWD HYLGHQWH FRP H O7HIIHWWR HQWR $
VWDWH³JDGHULF LQ SDUWFRODUH O D JHVWRQH GHOOH DFTXH UDSSUHVHQWQQQ LDDH LQWMUHHQ] D FRQ
O7HIIHWWR SURJHWWDOH ³YLDGRWW HG ³DUHH GL LP ERFFR´ QRQ FRQLJXUDQR O7HVVXQD
, # , 4
/ * , # 2 4 - # % %
q DQRUWUQH GLXQD SRWWQ] LDOH SUHWHQ] D GLDFTXH LQTXLQDWW O7TXDOH D VXD YROWD SRWHEEH GHWWUP LQDUH XQ7DOWW
6 ' % # ' 4

$! . :

. # $' %#/ " *' --	! -- "#&! +1! (#	/ ! --#/ -' $. # (#
?4 # % $ $, 5 $ * 5	! 6 $ %	# 6 ' % # '

! / / "- / ' "! !) # $-' $' ((! %# ' $1# $' & 1-"+--#0!

% # 6 $
% ## 6 % $ 4
" , GHWWUP LQDWR GDQQ (# #$! . # $' % (-" $& %#1&!) # *
LQVLWW VXQ7DUHD GL7RUEHQO 8 % ## # 5
!) # (. ! $' - , ## % ' ## *
4/ # , (?
+ 9 ,)4

, ' , # 6 % $
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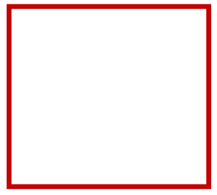
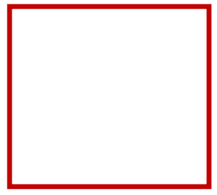
8 * ,
DFTXH LQ SXQWR GL FRQWRRR ³SUHVLGLGXOH´ LQ FXL DYYLHQH OR VFDUFR GHOOH DFTXH P HWWRUH KH QHOO UHWH LGUR
% , 6 $6 , 4

/¶QWHUYHQWR P RGLILFD LQ P DQLHUD VRVWDQ]LDOH L SUHFHGHQWL VROX]LRQH FKH SUHYHGHYD FKH 6
% , , , % 4 % , , ## #
* , % # # # 6 *
, , , 4
2 * , ; $
QLWWR FRP XQDOH 38& VHP SUHDP SLDP HQWP DJJRUH SHUJDUDQW¶QQYDUDQ] DLGUXOFD DOYROXP HGLSUP D
SLRJJLD H DOP DVVLP R YROXP H FRQWHQXWR LQ XQ FRP SDUWP HQWR GL XQ¶DXWRFLVWHUQD
, # , , 4
, , 6 ' * %*
YLDELOW GL UFXLWR ,Q VDOVHQWR ¶QWHUYHQWR SL• UHPYDQW q TXHOOR GL GHYLD]LRQH GHOOD YLQHUH 3RFKH
(" --) !)# (.!$'- 4





$6. 6WDWR GLDWWR HLQGLYLGXD]LRQH GHOO¶LQWHUYHQWR ,1
* , FRQHUP DQGR ¶P SRVVD]LRQH
%* ## # , %‰ # # $
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#
UHDQ] D]LRQH GL DFXQH P LJ ORUH DQ¶DWWDFFR VLVWHP D GLUHJLPL D]LRQH LGUDXOFD GHOOH DFTXH GHOOR 35 LR GL 3R
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/ 4	, #	! 6 $	: % 6 $6 ,
		# % ,	: % GHOODVVHPEOHD JHRP RU %

&RQ ULIHULP HQWR DOO³ LP HQVRQH FRVWUXWWRL´ LI DWWRULSRWWQ] LDOP HQWR FDXVD G¶LP SDWWR 6 ,
, * % % ,
DOOP SLHJR GL IXLGLGLSHURUD]LRQH QHOFRUVR GHOOD UHDOL]] D]LRQH GL P HQWWDWWR
6 , 6 % (0 , ##) * ,
5 6 , , D #
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, ' , * %
GHOO¶DVVHPEOHD JHRRUGLQD LQ TXDQWR DI DUHH GLFDQWHU H DI OYRUD]LRQL HVSHYLWWR SRVVRQR LQWHUIHUH
, , 6 , 4
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% * , ## 4
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% ## GHP RODW LQ RSHUD q LQ IDVH GL YDOXWD]LRQH ¶QQWDOH
. %J * ##
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/ 4	/ # ,	x , $, $	: % # # GLTXDQW GHQRPLQDWLRQ
/ 4	, #	, $, # , x # % * $ $	
/ 4	: , # $ 0 , #	# % %‰ ## #	
/ 4	! # %‰ % #	%$ %$ ##	

* ¶QDQFLDO SDUDPHWHU , (% 4) * # %‰
, # %‰ %‰ # % ## $
(% / 4 #) , DQG P ELWR 7RUEHQDFKHU QRQRVWDQGDUG GHQRPLQDWLRQ]] DJLRQH GHFDQWHUH LQ DP ELWR 7RUEHQDFKHU SHUIDYRUUH ¶KVR
GHQ¶DXVWDWDGG SHULWDVSRUWGLFDQWHUH / DVRX] LRQH SURJHWWDDOH SURSRVWD FRQVHQWDW DP XQP LJORUDP HQWR GHOO
%‰ % % ' ,
DCFRQWP SR LSRWMC] LDQLP SDWWDP ELHQWQDQGHHWUHQWDWDQ¶QTXLQDP HQWR DFXWWFR HG DWF RVHUFR &Iz KD
6 ' % , %*
7 , # %‰ 6 ' , & 4

, % ¶) # (.! $' -
UHUHP HQWR DQ GHP RQ] LRQH GHLYLDGRWW6 HFFD SHULTXDQHUH SUHYLWR ¶DQDJP HQWR QHOSUR
,) HG DQ¶P ERFFR GHQDJDQUH ¶) # ' (# #$! . # $' % (-" $& %#1&!) # * * %‰
VRQR QHQ¶UHD GL7RUEHQDSHUQ¶QVHUP HQWR GHO , 4

, , , # % %‰ , , % $
, 6 , #
& SHUTXDQWR DWWHQH LSRWMC] LDQLHIIHWWLVXOD TXDQJV GHQRPLQD4
! / / "- / ' "! !) # $-' $' ((! %#' $1# $' & 1-"+--#0!

" % %‰ # # 6
IDVH GLFDQWHUH 6LSHFLILFD FKH QRQRVWDQWH LDQDQDLGLTXDQJV GHQRPLQD SHUR VWDWR DWWDQWR SHUR VWDWFRQGRWW
' 6 % , # %
GHQDO TXDQJV GHQRPLQD SHUDO IDVHFRWWXWWD VRQR VWDWH IIHWWXDWH XQFDP HQWH SHUVH UXHQWLQDQW/

x (: -)5
x % (: 4)5
x 3 # (" <)4

, # # 8 % *
6 %‰ , ' D 4

/ ¶RELHWWR GHOO SUHVHQWH DQDOLVL VWDWR TXHOOR GL VWP DUHHSRWMC] LDQLQWUHUHC] H VXOO TXDQJV GHQRPLQD DQH DWWLJLVFLDQWH SHUDO RUHDC] LR GHQRSHUD RJJHWWR GL VWXGLR
8 , # , , %Q * * $
6 (: - : " <) , '
4
, , %
VRUJHQWDUHDQLFXLq SUHYLVWD OD P RYLP HQWD] LRQH GHOP DWHULDOH SRYHUXHQWH HQHP LVVRQH GHLJDV GLVFDULFR
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% # 8 %Q . 9 : < + & Q @ . ,
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$ (5 0 2 ' 9 LHZ LQFRUSRUD LSULQFLSDOLP RGHOOL GLFDPRQR XWQ] DWWGDQ¶ 6 (3 $ DWWDYHUVR XQ¶QQMWUDFFLD LQWW
4 0

x 5
x / 2 5
x / $ 9 : . 4

. 9 : < + 8 ! (K$!)
EDVDWR VX XQP RGHOR GLVWDELOQW DWF RVHUFD GLVWR³3 DQH HWDOW ERXQGDU\ ´- * , $
, % % % #
GHJOLQTXLQDQW¶HIIHWR RFFDOH GHQRRUJUDID GHOOMUURR HG LQXQW P R LFDORRQHOOYLDOOHVXERQ] H P HWRU $
* 4

' &8 +#% ± ! +11# $ (+ ' # #1/ ' "1# $ % (, ' "1# $,

' &' -- "'	$&' $-"! . # $' ' %#! !$$+! %# :M*5 ;	' %#! !$$+! %# "' *#1-"! -! %(((! &' $-"! (# $! ,1 #" $. ' ± 3 $% +") ! $:M*5 ;	4 XDQW/ GHQDUDLD & / (' 11#0! :M*5 ;	# #' $ " ! -#0 :M*5 ;
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+ # # == B $
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	4		4	- -
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X 6 % , -- X * , %
% 4

%* SURSRWW SHUQ) # ") ' ((! &! $-# "# . ! . # $' $
%‰ % % ' ,
GLP LQXHQGR DCFRQWP SR LSRWWQ LDQLP SDWWDP ELHQWQDQGHQWDIIFR HU DWWDQQQTXLQDP HQWR DWF RVHUFR &Iz KD
6 ' % 6 ' , & 4

! % , SHUQ) # (. ! $' - % # # GHLYDGRWW6 HFFD SHULTXDQHUD SUHYLWWRQQDQJDP HQWR SURJHWR DSSURYDW HG DQP ERFFR GHQDIJDQHUH HSHUQ) # ' (# #$! . # $' % (-" $& %#1&!) # FKH KD HIIHWWR VRR QHQQUHG L7 RUEHQD SHUQWQV HUP HQWR
, , ,
, %* ³Q ´ P RWWDQR * # % $
, 4
,9, , ! % - %
% ## # 3URJHWR GLFDQWHU] D]LRQH UHDWWR DQDGHJXDP HQWR GHOWWP D
± - ± 4

9 , # # * *
% , ## #
GHQQQUDWWQWKWWUD WWDGDQH
* # , ' 6
# % 6 ' 6
4

/ D WWEHQD VHJXHQWH USRWWLQP RGR VFKHP DWFR LSDWVDJJLQRJIFLGHQQQDQDWLHYLGHQ] LDQGR JQLP SDWWSRWWQ] LDQ
, 4

$ 27 :

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/ 4	# $ ## # $	< # , '	# ,
		# $ $ *	+ $ $

/ QPSSUHWDP HQWR GHLFDQWHULFRP SRWD LQHYLWDELP HQWQ QWRGX] LRQH GLHQP HQWYLWLYLOU DWDQQQXQ] R GLP DF
* ## DQQQWQLQR GHQDH DUHH GLFDQWHUH WDQH LQWUHUHQ] D SXz WXWDYLD ULWQHWL
*7 , ' , 4

/ QP SDWR GHCFDQWHUH GD XQ SXQWR GLYLWD YLXDO$, 8 $
, # , $ 6 , '
, % , , ' ## #
4

" ( ) * % # ,
% # 8 6 %
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, # , , ' 4

/ QRFFXSD] LRQH GLVXRR SHUDUHDQ] D]LRQH GQDQQ SXz HVVHUH P LWDWDDOWP LQH GHQDIDYRUD] LRQL
, # * 6 $
% 4

3HUTXQWR FRQHUQH QDQDWL GHQQ SHUD QHQDD VXD GLP HQWLRQH ILVFD RELHWWR GHQDQDWL SDHVDJJLWWFD q
6 , , # *
I 8 #
HQRSHUDLQ SURJHWR

2 4 - * # % # %
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, , , , #
, UH LQ FLDVFXQD DUHD q VWDWD DQDOL] DWD QHVJHQ] D GHGOH VSHFLH DUERUHH H
, 5 % # $
% , % # ' HQGP SLDQWR LQ VWUP LQL GL VWUHQR YH-J HWDOH
4

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FRQ QHQVHUP HQWR GHOQXRYR IRUQLFH SUHYLVWR QHQGP ELWR GHQHP LQD] LRQH GHOWRQFR GL VFDP ELR4 9
TXDQWR SURSRVWR QHQGP ELWR , # , %*
% 6
, 4
/ (& 3) % GLUP LWUH QP SDWR YLVYR GLVWDO
*7 , % ( )
* ( )4
6HEEHQH GDOSXQWR GL YLVWD QDWXUDOLVWR QDUHD , F , *
1 , ,
* ## , ' " - -
* % ##
VFDUSDWH GLFRQWQLP HQWR GRYXWD DQDFFOYLV ,
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,9, *' $-#341#&#

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< QWHUL]] DJLRQH GBFX] LRQH FRQ DTXDGH VLq LQWHR LQGLYLGXDUH QHQVHP HGHOH RSHUH
% ## ## # % ' 6
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, % 6 ' , ,
4

/ H DWWLVV GLFDQWHUH VLVYRJHUDQQR SUHYDOHQWHPHQWH VXQQRUR DFFR GHOOH RUH H TXLQGLGH YDQXWD LRQLDFX
* % * 6 4 , # %
# , ' , %% / - (* ,
# , ' %) , ,
/ < J / < " / < / < &4 % 6 , # * , '
8 % , # , ' 4

/ QDQDOLGHQ2 SHUDQHOOD VXDGLP HQVRQH2 SHUDWWDWWHQH FRQFKH QRSHUDLQSURJHWRFRUSHUDVXDP DJJIRU
% , 4
, # * , % $
, 4

$ 3! :

. # $' %#/ " *' --		! -- "#&! +1! (#	/ ! --#/ -' $. # (#
< 4	$, %$ * *	, $	: %
< 4	2 ,		

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, , 0

x ! ± $ QHQQDUH SRWDWD QRUGGHQP EWR GL %RO
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- / < & ± / < , &
- / < J ± / < , < , ! 3 & $3 $ $
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x 2 0
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GRYXWDDQ¶QYROXFUR GHQ¶HGLL 4
/ DVFHQGGLLSRW]DUHXQIRQRVRODP HQWR GLIDFFLDWDSDULD G%q IUXWR GHQ¶HVSHUHQ] DP DWUDWDLQQXP HURVH
8 , * * # %
, # , 8 4"
, %
, 4(H SRWR QHQ¶DUHD GHQ¶QQMUFRQQHVVRQH * URQGD GL
)4

$ 5. '

#&' -- "'	' HVWQD]LRQH G¶XVR	# $	' 2 ! L A% : ;B	' 2 # 8- A% : ;B
+	3 2 O<".	- B	4	4

, % * , 4
FDVR GLLQWUYHQWGLUHWWSUP D GLSURFHGHUHFRQ¶QWDDO]LRQH GLQXRYLLQIVLq RSSRUWXQR YHUILFDUH LODYHQ GL
6 , 4
,9, , "
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6 # % ,
% , D ## 4

$ 5 :

. # $' %#/ " *' --		! -- "#&! +1! (#	/ ! --#/ -' $. # (#
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9 % # % , , # *
TXDQWR GHWUP LQDWR QHQ¶DP EWR GHSURJHWR GHILQWR R , ## , %
WDDILFR SUHYLVWSHUQ¶QLUDWWKWKUD LQ HVDP H UHVDQR VRVWQ] LDD¶ HQWHLP P XWDWQHQD FRQLJXUD] LRQH LQGLYLGXDWW
% 4H % % , #
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/ ¶QQGLYLGXD] LRQH GHJOLVFHQDULGLUHP HQWR DWXQQDLLIIQLGHOD VWP D GHJOLHIHWWSRWQ] LDDLQGRWWGDOHHDWWYLW
, # 8 % # % % '
GHQ¶DJHQWHILVFR LQ HVDP H ,Q WDOVHQWR ¶QQDQDLq VWDWWHIHWWDWD UHDWWYDP HQWHDOHDYRUD] LRQLH DOHDWWYLW
GLFDQWHUH SI• FUWFKH VRWWR LOSXQWR GLYLWD YLEUD] LRQDOHH GDQ¶IIHWWD SUHVHQ] D GLUHFWWRULQHQ¶QQRQR

/ % , # * %
, 46RQR GXQTXH LQMUHVVDWWQ) # ' (# #$! . # $' % (-" $& %#1&!) # ¶"' !
%# ") ' ((! SHUQ¶QVHUP HQWR GHQQXRYR LP ERFFR H ¶) # (. ! $' - 4
6 * * *
¶DVH GHQDJDOHUHVWWVH
6 # ## # , ' ,
QHQ¶DP EWR GHOD UHDQ] DLRQH GHQDHIRQGD] LRQH GLGLSQQWH GHQDVSDQH
% , # F
HVVHUH DWWXEXLWD DQ¶HVHFX] LRQH GHQDJDOHUH ¶DVHQ] D GLUHFWWRULQHQ¶QQRQR GHL P HWUL
4
% # , 8 6 , '
, !) # (. ! $' - , 8 ## # ,
, RJJHWR GHOD SUHVHQWWDUDQWWSURJHWWDWDH ,Q SDUWFRODUH ¶DWWWLVW SUHVD LQ HVDP H q TXHOOD
UHDWWYD DQ¶HVHFX] LRQH GHLSDQGLRQGD] LRQL

,OP RGHQ GLSURSDJD] LRQH SLHJDWR YDGER SHUWXWWL WSLGLRQH VLEDVD VXQ¶HTXD] LRQH GL%RUQWW FKHWWHQH
FRQR GHLGLYHUVLP HFFDQWP LGLDWWHQXD] LRQH D FXL¶QQGD YLEUD] LRQDOH q VRWWRSRVWDGXDQWO SURSDJD] LRQH
4

$ 5 I N N á p A?Ô:å ?å ;
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8 %‰
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,OSUP R WWP LQH GHQ¶HTXD] LRQH HVSUP H ¶DWWWXD] LRQH JHRP HWUFD GHOOWUHQR

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M % # # ## # ($
% % ') , # (, %)4 ,
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o U
,OVHFRQGR WWP LQH GHQ¶HTXD] LRQH ID UILHUP HQWR LQYHFH DQ¶DWWWXD] LRQH GRYXWD DQ¶DWWRUELP HQWR GHOWUHQR
% # 4 %‰ # 8 $
% 0

= L t èBß ?

, %8 % 6 # N# q O DYHQ¶RFFLWV GLSURSDJD] LRQH GHQ¶QQGLQP VHE LOD DWWRUH GLSHUGLWD GHOWUHQR
M * , $
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0
o IDWWRUH GLSHUGLWD
o U -- (, ' #)4

8 WQ] DQGR WDQGP HWRGRJLD QRWD¶HP LVWLQH YLEUD] LRQDOH GHOP DFFKLQDUH HO GLWDQ] DWD UEHWWRU$
q SRVVLEOH FDQRQDU¶HQWWV GHOD YLEUD] LRQH LQWWP LQLDFFHQWURHWWLQQHFHVVRQGHQ] D GHOSRWW] LDOH HGLIILR
% 4

$ CILQH GLRWWHQHU XQD GHVFULILRQH FRP SOHWD GHOP RWR QHFFHKDUD]LRQH q VLDWD P LVXUDWD OXQJR WH DVLP XWD
G , O, 4
* 4 6 (2)8 #
, 4 # (2 2) # #
, 4 2 8 # #
2 8 # - 4

1 HOD VHJXHQWH VDEHOD YLHQH UISRUWDWD XQD VIQWHVL GHL OYHOHHTXLYDOHQWL GHOOD HTXLYDOHQ]D SRQGHUDWD LQ IUH TXHQ]D UHDOYDP HQWH DQQXQFLDWD P LVXUD ,QSDUWFRDUH VLUSRUWDQR LYDORULP DVLP LP LVXUDWWXLWH DVLGLP LVXUD
4

$ 53 "

#	) #	#1-! $. ! : ;	+"! -! #1+"'	OQ 2 :% ; :H;
	-		-	4
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			-	4
		-	-	4

(]) ,

' DQ¶DQDOLGHLOYHOHHTXLYDOHQWL FRWD FRP H OD VIVP LFLW LQGRWWD GDOOXVR YHLFRODUH VXL YLDGRWWDVXRVWDGDO
4 % , 6 , , 6 , %
% ; " = 0 - 3 % 4

3 HUTXDQR UU XDUGD LWDWWLQJ DGOHUD VLSXz IDUH ULHUP HQWR D UIOHYLFRQGRWWD UIGRVR GHOOXWWDGD $ WD
9 4 , %
* , , # %
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$P EILHQZDOH UHGDWWR QHOOD EWWR GHOSURJHWWR SHUILQRGR VWUDGDOH H DXWRVWUDGDOH GL* HQRYD $GHJXDP HQWR GHO
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GHOO LQIVWUR GHOOD P EILHQWGLFRQFHUWR FRQOO LQIVWUR GHL%HQL&XOWXUDOL
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* Q2 SHUD DO³6 ´ RYVHUVR DG LQGLYLGXDUH LOWMP D R QLQWMVYHQWR LQ
SURJHWWR FRQ SRWWQ ILVLFD KD FRQGRWWR DQDOWFRO] LRQH GHOOR RGHOOR
GDOOR³6 FKHP D LQIUDVWUXWWXUDOH´ HGDOOR³6 FKHP D IXQ]LRQDOH´ 6HP SUHFRULHUP HQWR DOO GLP HQVRQH ILVLFD OO
VFRP SRVW]LRQH GHOOHP HQWR SURJHWWXDOH ³0 DFURHOHP HQW/KD GHWWUP LQDWR TXDOXQQHURUVRWWRQVHP L TXHOO
GHOOH³,QIUDVWUXWWXUH DXWRVWUDGDOH[QRYR´ GHOH³,QIUDVWUXWWXUH DXWRVWUDGDOH-HVVHQWQRJJHWWR GLUITXDOLFD´ QRQ
FKp GHOH³,QIUDVWUXWWXUH DXWRVWUDGDOH RJJHWWR GLGLVP LVWRQH´ 9 , ## # $
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GLYHUVH DWWUVWFRVWUXWWXH DQDOWFRO] LRQH GHOH YDUH WWSRRJLH GLDUHH DVHUY]LR GHOOD FDQWHU]] D] LRQH QRQFKp
6 , ## # % 4

1 HFFDVR GHQRSHUD FRP H HVVHUF] LR LOOLYHOOR GLVFRP SRVW]LRQH QRQ KDLQYHFH GDWR HVVR VVELOH
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! 2 3 # # UUHYDQWWQ-HQRWWDOOD
UUHUP HQWR HVFOXVLYDP HQWH DOOH SDUWLGRSHUD R DOOH DUH-H GLFFDQWHUFKH KDQQR
, # 4

HMLVWMQWSHUSHUHP HWWHUH¶DDORQWQDP HQWR GHKDR VP DULQR H G¶DSSURYYLJIRQDP HQWR LQ FDQWHUH GHLSUIQFLSDQP DW
UDDQGLFFRVWK]LRQH LOSURJHWR SUHYHGH G¶QQVWDDD]LRQH QHQQRGR GL7RUEHKDD GLXQD JUDQGH DUHD DVHUY]LR GHKD
/ - 6 LP SRVWDW GLUHWWP HQW VXQG¶XWRWWDDGD $ FRVWWWLW GD XQ UDHYDWR GL
(* ' # % , #)
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GHKD $ GXUDQWH ID IDVH GHKD FRVWK]LRQH GHKG SHUD 3 UYGHUDQGR G¶KVR GHKG¶DXWRWWDGD SHULWDVSRUWGLFDQ
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GHKG$ XWRWWDGD $ H G¶HKP LQD]LRQH GHKD FRUVD GLHP HUJHQ] D RWWHQHQGR LQ TXHWWR P RGR XQ³P LQLVYLQFRGX
* # 4
SURSRWW SURJHWWDDH GLYDUDQW RWWP I¡] D LQIXQ]LRQDP HQWR GLDDXQ HQHP HQWGLFFRDUDP HQWR WD G¶DP ELWR
GLFDQWHUH H G¶DXWRWWDGD LQGLYLGXDQGR XQ IQVLHP H GLRSHUH VLD D FDUDWWHUH WP SRUDQHR FKH GHIQWYR G¶RFFRU
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UH]] D H GLVHUY]LR GHKD FIUFRD]LRQH VX XQ¶DUWMUD WD GH F ' # 4
/ D P RGIIFD FRQVWW QHKG¶QWRGX]LRQH GLXQD IDVFLD DWMUDDH GLQXRYD SDYIP HQW]LRQH SHU¶DDUDDP HQWR GHKD
DWWDDH FRVWD G¶HP HUJHQ] D P HGDQW DHYH UHWWIFD GHOERUGR WWDGDDH HWWWW GHKDXWRWWDGD $ DQIQH GL
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* % DH IQ HVHUF]LR SHU¶QWD GXUDW GHKD FDQWHUH]
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/ D VRX]LRQH SURJHWWDDH SURSRWW FKH GHWWUP LQHU XQ P RGHWRFFXSD]LRQH GHKRFFXSD]LRQH DDDQDUDP HQWR
DG¶DDUDP HQWR GHKD FDUHJJDW WQ IHUDH DL P T GLFXLFIUFD P T DG¶QWWQR GHKR VPDWWDDIILER FHQ
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SRWWQ] LDQLP SDWWDP EIHQWDDQGHWWDDIILER DH DWWDDG¶QQTXLQDP HQWR DFXWWFR HG DWF RVIHUFR / ¶HIIHWWR q GD FRQVGH
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% GDDH LQ HVHUF]LR SHU¶QWWQD GXUDW GHKD FDQWHUH]] D]LRQH SHUP HWWWDDQQR
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] LRQH GHKDH VWWVH H FRQVHUXHQWP LJ DRUDP HQWR GDDSXQWR GLYLWW GHKD TXDQJV GHKG¶DUD
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GHKG¶DUHD GLSURJHWWR / D YHUIIFD SXQWWDDH GHKDH QXRYH DUHH IQWWHWWDDW GDJ DILQWYHQWW KD SHUP HWWR GLFFRQWD
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x RQFHQWUDUH DH FDDWWFIQFLQHDD FDELQD 9 D %SHUP HWWW GLDP LWDUH G¶P SDWWR YLWYR GLWDDRSHUH
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6 LSUHFLVD IQIQH FKH DO YDUDQW WUHDWWD DG¶HP LQD]LRQH GHWWRQFR GLVFDP EIR DH FXLYDDXW]LRQLVRQR UISRUDWW
% 4 4 YD DG IQWW WDVLLQ SURVVP LW GHG¶DUHD GLFDQWHUH GHG¶P ELWR 7RUEHKD FRQ G¶QVHUP HQWR
GHG¶P ERFFR GHKD JDDHUD * HP IQIDQR / ¶QVHUP HQWR GLWDDH LP ERFFR q YDXWWR QHKDH WWEHKDH VIQWWFKH TXL
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FKH G¶QVHUP HQWR GHG¶P ERFFR QRQ KD HIIHWW VXGH DUHH GLFDQWHUH H VXGH WSRRJLH GLDYRUD] IRQL SUHYLWW
QHG¶P ELWR 7RUEHKD FDQWHU]] D]IRQH * D6 ## ,
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GHG¶P SDWWDR HWWHWWDWW VDUDQQR HIIHWWDW LQ XQ¶DUHD GHGLFDWW &, SHUP HWWWQGR TXLQGL¶DO
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DUH ULXGGR G¶QVHUP HQWR GHG¶RSHUD GLDWWDYHUVDP HQWR GHG¶P ELWR GHKDH DUHH GLSHUWQHQ] D GHDFRUVR G¶DF
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VFRQR FRQ LDGHIXVR GLSLHQD GHDFRUVR G¶DFXD YHQWVWHUR SURQXQJDW ,
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QXRJR GHG¶QUDWWQWKWXD HWWWQW FRQ XQ¶QLFD SLDD LQ DDYHR4 6 , # $
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H TXLQGLP LJ DRUDWWR GHG¶QVHUP HQWR GHG¶RSHUD QHDFRQWWR4
&RQ ULHUP HQWR DG¶DDUDJP HQWR GHDD VHGH VWWDGDDH LQ HWWHUF]LR LOSURJHWWR QRQ P RGLIFKHJ G¶DWWDDH DVVHWWR
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/ H RSHUHD YHUGH SUHYLVWKDQQR¶RELHWWR GLLQWJUDUH OH RSHUH GLSURJHWWR FRQ LOFRQWUROOR DP EHQHIRQL
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RSHUH D YHUGH GD DGRWWDUH LQ FDVFXQD DUHD q VWDWD DQDOL]]DWD QHOJLHQGD GHOOH VSHFLH DUERUHH H DUEXVWLVH LQ
5 % # %
GHLOOYRLUH SHUFHWWLYR IXQ]LRQDOH QHOMP SR GHOOP SLDQWH LQ VWUP LQLGLVWUHR YHJHWDOH SRUWDWR

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x FRP SDWLELOJW HFRORJLFD FRQ LFDUDWWHULVWLFKH LRQDOL GHG¶UHD GLLQWJUYHQWR JLj VWXGLDWR QHG¶P
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9 DSSUHYHQWRQR XQR VWDGLR GLQDP LFR SL• HYROXWR GHSUDWR G¶QDP ELWR GHOD VHUH GLQDP LFD GLYHJHWD]LRQH FKH
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FHQRVLQDWXUDOL GLHYROXHYHUR IRUP H SL• P DWXUH G¶QDP ELWR GHOD VHUH GLQDP LFD GLDSSDUWHQHQ D ¶D SIDQWH
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JHQHUDP HQWEDUHUD³IRQRVRQWX q SRVWELEOH SUHY * $
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/ ¶HDQFR GHOHEDUHUHDQWXP RUH FRQ¶HUHDWH GLP HQVRQL q VLQWWX] DWR QHOD VXFFHVVLYD WEHKDD IQ FXLq
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VWGLR SUHP LQDUH DP ELHQWDOH LQ UHDJLRQH DLGLYHUVLFDWV SHWWSURJHWWDOHG DP ELHQWDOO WDWWDVQHQGP ELVR GHOR
6WVVR / ¶DSSDUWHQHQ D DG DER SURHVVRQDOH RYH SUHYLVR q UISRUWDVQ FIDVFXQR GHLFDWWOGHJOHDERUDV

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