

e9\$/8\$7,216 \$ 3267(5,25, '(6 352-(76),1\$1&e6 3\$5 /()21'6
'(6 1\$7,216 81,(6 3285 /\$ 'e02&5\$7,(

7DEOH RI &RQWHQWV

I. EXECUTIVE SUMMARY.....1

II.

, ([HFXWLYH 6XPPDU\

7KHUH LV DPSOH HMLGHFWLYHROHWKHRI WKH LPSOHPHQWDWLRQ
WKH SODQQHG DFWLYLWLHV ZHUH FDUULHG RXW DQG VRPH
H[SHFWDWLRQV GLUHFW GHEDWHV EHWZHHQ \RXQJ OHDG
UHSUHVHQWDWLYHV ZHUH LQLWLDWHG GXULQJ WKH HOHFWRU
DFWLYLWLHV SURSRVHG GLQ WKH WUDLQLQJ RI D VXEVDQWLD
DFURVV WKH FRXQWU\ DQG WKH HVSHQV\O\ MFL]ZWRZHUH LQIRUPH
ULJKWV DQG WKH LPSRUWDQFH RI FLWL]HQ SDUWLFLSDWLRQ
ZDV DOVR GHPRQVUDWHG E\ WKH GXSOLFDWLRQ RI VHYHUDO
ORFDO DXWKRULWLHV RU \RXQJ OHDGHUV 7KH SULRULW\ DFFI
PHWKRGRORJ\ HROXOJ SHRSOH DQG WKH SXEOLF QRW RQO\ WR
ULJKWV EXW DOVR WR DSSUHFLDWH WKHP LQ UHODWLRQ WR
+RZHYHU WKH WUDLQLQJ DFWLYLWLHV ZHUH YHU\ VKRUW DQG
ZD\ RI SUDFWLFDO FDUV VWXGLHV ZKLFK VKRXOG KDYH HQDE
LQIRUPHG DERXW 3:K\ LW LV LPSRUWDQW WR YRWH EXW DOVR
DQG WR FRQWURO WKH DFFRXQWDELOLW\ DQG WUDQVSDUHQF\
SURMHFWHFWLYHQHV ZDV KDP SHUHG WR VRPH WKH HVSHQV\O\ QW E\
UHVRXUFHV DW FHQWUDO OHYHO /LWVOH TXDOLW\ FRQWURO
PHDVXUHV ZHUH XQGHUWDNHQ WR VXSSRUW WKH \RXQJ OHDG
PRQLWRU WKH RYHUDOO SURMHFW SURJUHVVHV LQWR DQ HIIH
PRELOL]DWLRQ RI WKH \RXWK

7KH SURMHFW ZDV DPRXQW RI UHVRXUFHV XVHG ZDV FRQVL
DQG RXWFRPHV GHOLYHUHG \$OO DFWLYLWLHV ZHUH LPSOHPH
LW DSSHUV WKDW WKHUH ZRXOG KDYH EHHQ VFRSH IRU 5\$-
FRXOG KDYH KHOSHG WR UHLQIRUFH WKH SURMHFW PDQDJH
DVSHFWV

7KH SURMHFW HVVHQWLDOO\ GHOLYHUHG FRVWV VS O\ D\ Q\ P\ S\ U\ P\ M\ C
XQGHUOLQH WKDW WKLV LQLWLDWLYH LV WKH ILUVW RI LW
GHYHORSPHQW RI D PXOWLSDUW\ HOHFWRUDO V\ VWHP \$OO L
DQG YRWHU HGXFWDWLRQ LV D IXQGDPHQWDO QHHG IRU WKH
JOREDO DZDUHQHV DQG LQFUHDVHG NQRZOHGJH DPRQJVV W
RI XVLQJ WKH DQG FLWL]HQV ULJKWV 7KH SURMHFW GHPRQVWU
LPSRUWDQFH LQJ UHDO FRQVLGHUDWLRQ WR WKH \RXWK 7KH
SURMHFW FRQWULEXWHG LPSOLFLWO\ WR WKH UHHVWDEOLVKF
DQG FLWL]HQV HQDEOLQJ \RXQJ OHDGHUV DQG PDQ\ LQVWL
Dö L W Z p K H H ° U @ p K € @ J r ð V V 0

f &LYLF DQG YRWHU HGXFDWLRQ UHTXLUHV D EDODQFH
,Q IXWXUH DFWLYLWLHV LW LV UHFRPPHQGHG WKDW UHDO Z
LQWR WUDLQLQJ WUHDWPHQWV HOS WR GHYHORS D UHDO GLDO
WKH DXWKRULWLHV WR SXW LQWR SUDFWLFH WKHLU NQRZ
SURPRWLQJ WKH UXOH RI ODZ7 DQG FURR BQQGDWLQJ D F HEDVHC
&RQFOXVLRQ LLL DERYH

,O H[LVWH GH QRPEUH XVHV QYHLGHGFFVWDFRXLQLVQDQW pFXWpHV
MXJHPHQW GRLW rWUHQXDEHQVXGPEOHj GX SURMHW 7RXWHV
SURJUDPPpHV RQW pWp H[pFXWpHV HW FHFL DX GHoj GHV DW
MXQH V OHDGHUV HW UHSUpVHQWDQWV GHV FDQGLGDWV RQW
FDPSDJQH pOHFWRUDOH /H QRPEUH HW OD GLYHUVLWp GHV DF
IRUPDQWQRPEUH VXEVDQWLHO GH MHXQHVGXCHDQW HW
SXEOLF TXL RQW pWp LQIRUPpSRGHWDEKHVGURDVSUHWMLGLSDW
ORGXQ SURFHVVXV/FOHFWRUDOD DXVVL pWp GpPRQWUpH SDU
SOXVLHXUV VHVLRQV GH IRUPDWLRQV LQLWLpHV j OD GHPD
OHDGHUV /D SULRODWSDDWFLFLSDWLRQ HW DX GpEDW D QRQ
MHXQH V PDLV DXGMLUFXLQKELDF GH OHXU GURLWV PDLV DXVVL
OHXU UpDOLWp SROLWLTXH HW VRFLRpFRQRPLTXH 7RXWHIRLV
FRXUWH GXUpH HW WUqV VRXYHQW XGHV GpH TXHW SDUHWL SXHV
DXUDLV SHUPLV DX[MHXQH V OHDGHUV GH QH SDV rWUH VLPS
LPSRUQWDOMU YRWHU PDLV DXVVL GX 3&RPPHQW DJLU HQ WDC
WUDQVSDUHQFH HW OD UHVSQVDELOLWp GH FHX[TXL PHWW
(Q RXWUH OH SURMHW D VRXIIHUW GH OD OLPLDWLRQ GHV
3HX GH PpFDQLVPHV GH FRQWU{OH TXDOLWp GHV IRUPDWLRQV
TXDOLWp GX FRQWHQX GHVVRXQVHQH FQWYQWV SHQWUHSULYH S
DSSX\HU OHV MHXQH V DQIRGHVW/FAHPGXQKSGHUPHVKGH /XUJH
OHV SURJUqV GX SURMHW GHDFURQVWUHLFDDFHPRLYDM/LRQ HW

ANEXULE D PROCURE

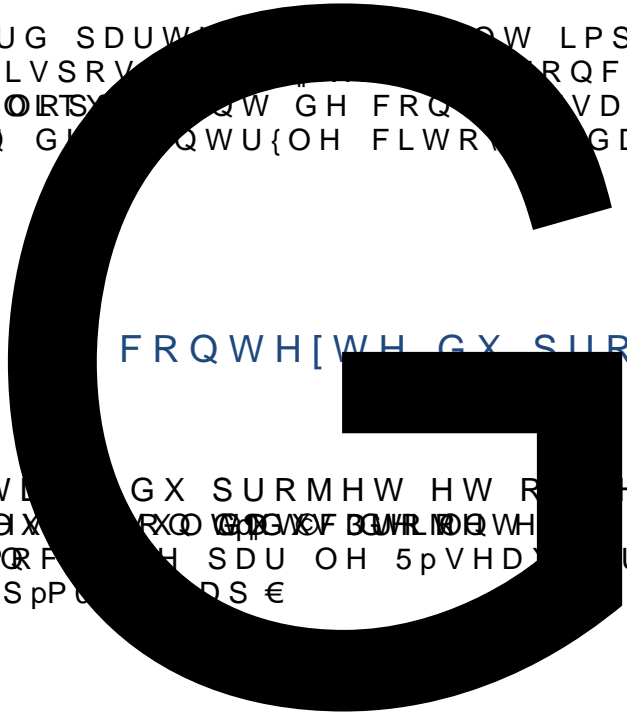
GH WUDYDLOOHU DYHF VRQ UpVHDX MHXQHV FHFQ SHLQVGH P
HQ DWWHQGUH

f /H SURMHW D RXYHUW OD YRLH j O PDS DUWO FHS DWL
QpFHVVDLUH GH GHF SUPTXHU XOM DSSURFKH VXU OH ORQJ WHI
LPSDFW VXU OH FRPSRUWHPHQW GH OD SRSXODWLRQ

f ,O HVW j FHW pJDUG SDUW LPSRUWDQ
SUDWLTXHVDHLOMFXQHV GLVSRV RQFUHWV G
DYHF OHV DXWRULWYVGHXHOITSY W GH FRQ VDQFHV SU
D IRUVLSURSOLODQRLQ G QWU{OH FLWR GDQV OD
SXEOLTXH

,,, ,QWURGXFWLRQ FRQWH[WH GX SURMHW

L 3UpVHQWDW GX SURMHW HW R HFWLIV
&H UDSSRUW SUPVHQWYDIX RO GPOV BWRLO WH H IRUPD
GHV MHXQHV SRXUPODLG pPF H SDU OH 5pVHD ULTXH -
GXUDQW OD SpRBUHX SpP DS €



Q TXLSpY DOXDWHXUV D SUpSDUp QD) Q)R)WH GHSGpFDVDDQWHOHV

48(/48(6 &+,))5(6 685 /(%85.,1\$)\$62

3RSXODWLRQ(6\$

0

3RSXODWLRQ XUEDLQH HQ GH
81'(6\$

(V\$UDQFH GH YLH QRPEUH G(6\$Q

7DX[GKDE\$ WLVDWLRQ GHV DGXC
HQ GH DQV HW SOXV(6&2

5HYHQDWLRQDO %UXW SDU KDE

/D YDOHXU DMRXWp GX)18'
'H QRPEUH XVHV LQLWLDWLYHV LQLWLpHV SDU OHV SDUWHQDL
318' HW QRQ HXURSpHQQH H[LVWHQW SRXU VRXWHQLU HW U
VRFLpWp FLYLOH 'DQV OH GRPDLQH GH OD SDUWUWLRQDWLROD F
FRQVROLGpVXFKRQWLRQ FLYLTXH HW DX UHQIRUFHPHQW GHV F
WUDYHUV GHV VRXWLHQV DSSRUWpV DX[RUJDQLVDWLRQV GH
GH VRXOLJQHU TXHGpGXFDWLRQWLFWLYXHH ILQDQFpH SDU OH)18
HW OD VHxOH TXL D HX OLHX ORUV GHV GHUQLqUHV
pOHFWLRQV SUpVLGHQWLHOOHV@GH WX QH WDLTXSDV FLEOp
H[SOLFVWHPHQW OHV MHXQH VROHWLpOHQWROHW O FRQYLH
HQ RXWUH GH PHFWLRQDSUHXPHSHWHWL VUDLQHTXLOH
TXH OHV DVVRFLDWLRQV MHXQH VFKpQHULPHFRXSHM FHW WISH
GLQGLWLDWLYH RULHQWpH VXU OD pHVSHXWVGHVGH DIIDLUV
SXEOLTXH VGHFDWURO FLWR\HQQH QWUDLV GX WkpwH
GH OD FLEOH MHXQH FHWWH LQLWLDWLYH D SHUPLV GH
WRXFKHU XQ JUDQG QRPEUH GH MHXQH EXUNLQDEp UHSUpVH

/1KH PpGLDQHVTKL GLYLVH OD SRSXODWLRQ HQ GHX[JURXSH QXDPULTXH VpVDX[OD
DjpH
/1QGLFH GH 'pPRFUDWEDGHKOp j SDUWLU GH LQGLFDWHX SURFHVVRXSpVHFQRUFDDWpJVF
SOXUDOLVWH OLEHUWpV FLYLOHV IRQFWLRQQHPHQW GX JRXYHUQHPHQW SDUWLFV
WISHV GH UpJLPHV GRQLW DLUHVpJLQGHVFXHQR GHVVRXV GH

pOpPHQWV GH GLVFXVVLQRQVVDPSQLTXHNSURVWUHXKQW OD UpD
LQVWLWXWLRQQHODHGXNIFRPSURFKWGX SURJUDPPH GH IR
HW GH VHQVLELOLVDWLRQ PRQWUH TXH FKDTXH DFWLYLWp D
WKpRULTXHV HW GHV pOpPHQWV HQJDJHDQW OD UpDFWLRQ GH

7RXWHIRLWVHHSWLRQ GHV FGHJWqUGH SRVPEWDFRQDDQLVIDQVGRQO
B' GH GOVSRQSDQW@X\$-DXFKQ4GL,ASRVLVHIQWH VXL YLY HW
C

x&RQFHSWLRQV GHV GXSOLTxpHV OHV SDUWLV SF SUPYHQWL
G¶DQLPDWLRQV GW UDGLRV ORF OHV MHXQHV U OD UpVRO;
x1pJRFLDWLRQ GH S GLIIXVpV SDU GHV FRQIC
DYHF OH &RQVHLO x\$X PRLQV SpULRGH S
OD &RPPXQLFDWLR DXGLWHXUV MH pOHFWRUD
OD &RPPLVVLRQ (O LQIRUPpV VXU (pOHFWRUD
1DWLRQDOH ,QGpSI
&(1, SROLWLTXHV G
HW GHV IRUPDV
SROLWLTXHV

9 4XHVWLRQV G†(YDOXDWLRQ

/HV TXHVWLRQV DQDO\VP HQYDODDQWL ROD GPX\SVLRMHW SRUWHQW
FDGLG†YDOXDWLRQ j VDYR†HUILOFL\$QHUFDOEISF FV OHW OD GXUDEL
/D YDOHXU DMRXWpH SDU OH)18'/D QWp[†JDSUPVHQW pWHXG GpHW
TXHVWLRQV HW VRXV T&M pWLRQDWWRLD LWpHV GD

L 3HUWLQHGFH

&H SURMHW FULW GH IDoRQ WUqV SHUWLQHGHQWH GDQV OH FRQW
LQWHUYLHQW j SRLQW QRPPp GDQV O†HQYLURQQHPPHQW SUP
pOHFWR†HDOH FWLRQ SUPVLGHQWLHOOH GX QRYHPEUH SR
QRWDPPHQW OHV MHXQH VV VRQW SHX HQJDJpV HW RQW PDV
/H SURMHW UpSRQ G[†DXVSULLGXLGpYHQRVSSHPPHQW VRFLRpFRQR
SU{QpV SDU OHV EXXWRQDVP VGDQV OHV TXHOV OHV FLWR\HQ
SULQFLSDX[GX GpYHORSSHPPHQW X†D VS DRLHQW TXQIRB BpV TXM
GLVSR†XQW PLQLGp†FXFDWLRQ FLW†LSTXRSR XHU OHXU GHYHQLU H
SD\

/H SURMHW SHWWDQWQW SDU UDSSRUW DX FRQWH[WH VRFLI
EXUNLQDEp &RPSWH WHQX GH MHXQHVVH GH OD SRSXODWLRQ
GH VFRODULVDWL B†FWRERQ W\SH
VHPEOH SDUWLFXOLqUHPHQW DG
pYHLOOHU OHV FRQVFLHQFHV H
DXSUqV GH OD PDMRULWp GH OD
EXUNLQDEp OHV FRQQDLVVDQFH
PLQLPDOHV UHTXLVHV VXU OHV G
GHYRLUV GHV FLW B†XQDQ&HOD H
SOXV YU†Q VFRQVLGqUH TXH OH
GpWHUPLQDQWV GX YRWH TXL RQ
HQ OD SRSXODWLRQ EXUNLQ
VHV FKRL[VRQW SRXU GH
SRSXODWLRQ OHV FDGHDX[TXI
RIIHUV DX[pOHFWHXUV SHQ
FDPSDJQH V pOHFWRUDOHV HW SF
FDSDFLWp ILQDQFLqUH HW P
DIILFKpH SDU OHV FDQGLGDWHV
OHXU FDPDJQH (Q UHYDQFKH
LQWpUHVVDQW GH QRWHU TXH
SRSXODWLRQ HQ PR\HQQH FRQV
FRQVLGpUHU TXH OH VHQWLP
VLQFpULWp GX FDQGLGDW OD FR
†[SpULHQFH GX†FDQ SIDG/DWQ

([WUDLW GX MRXUQDO 6LGZD\

IDFW†H†OU OXHGFH

/HFKRL[VSpFLILTXH GHV JURXSHV p†DEOHVHQW WUqV SHUWLQ
PHVXUH R• OD PDMRULWp GHV FLWR\HQV DFWLIV HQ kJH GH
SULYLOPjLp j MXVWH WLWUH OHV MHXQH VV HW SDUWLFXOLqUHP

7RXWHIRLV RQ QRWHUD TXH OHV GpSHQVHV DOORXpHV DX
GÄpYDOXDWLRQ UHSUpVHQWHQW PRLQV GH GX EXGJHW &H
DFFRUGpHfXWLRQ GHV DFWLYLWpV

5XEULTXH

7DX 7DX[SDU U 7DX[SDU
GpH[pFX DX[GpSH UDSSRUW
UpHO FRXW WR

6XLYL VXSHUYLVLRQ

9,, 5HFRPPDQGDWLRQV

L 'DQV O↑RSWLTXH GH UHQIRUFHU OD SHUWLQHGFH Q
UHFRPPDQGDWLRQV SKDVH SUSDUVDPKRGpBXW GX SURMHW DIL
PLHX[LGHQWLILHU OHV DWWHQWVH CHXWEXU QDHF1DLDND WRX
HQTXRWHU HQ SUHPLHU OLHX DXSUqV GHV EpQpILFLDLUHV

LL 0LHX[IRUPXOHU XQH VWUDWpFRUGIOHVXSNDOLWpLRQ
UDLVRQ GH OD IDLEOHVVH GHV UHVVRXUFHV KXPDLQHV GpGLp
RQW UHFRQQX TXH OD SOXSDUW GH OHXU pQHUJLH D pWp GpY
DFWLYLWpV 'DQV FH FRQWH[WH \$HDSUpWHPVLRQ GHPFRQYDR
UpVXOWDWRW GRLW FRQVLGpUHU FHW pDpFRQWFDYHFHSRMLHQWL
pWDLW YLVLEOH GDGXRFFDQW GRJLTXMHW

LLL 8WLQLVHU OHV pOpPHQWV GH UpIpUHQFH TXDOLV
DVXHU OH VXLYL HW O↑pYDOXDWRVQH UHLSRWRXKXLSURMHW TXH
XQH DWWHQWLRQ VSpFLILTXH DX[pOpPHQWV GH UpIpUHQFH TX
GH WUDYDLOOHU DYHF VRQ UpVHDX MHXQHV FHPD SHLQV GH P
HQ DWWHQGUH

LY /H SURMHW D RXYHUW OD YRLH j O↑DSDUWL FHSDWL
QpFHVVDLUH GH GHSUQSTXHUHQW DSSURFKH VXU OH ORQJ WH
LPSEFW VXU OH FRPSRUWHPHQW GH OD SRSXODWLRQ

Y ,O HVW j FHW pJDUG SDUWLFXOLqUHPHQW LPSRUWDQ
SUDWLTXHVDHVLQMXHV GLVSRVHQW G↑RXWLOV FRQFUHWV G

HVte0 m
e0 f6 m

x eYDOXDWLRQ GHV SURJUqV DFFRPSOLV HQ \$IULTXH GDQV OD Up
SRXU OH GpYHORSSHPHQW UDSSRUW 20' 318'
x &RXSODJH GHV (OHFWLRQV (QMHX[GpILV HW 3HUVSHFWLYHV
'pPRFUDWLTXH DX %XUNLQD)DVR
x /HV %XUNLQDEp HW OHXUV YDOHXUV &HQWUH SRXU OD *RXYH
)DVR 'pFHPEUH

\$QQH[H3HUVRQQHV LQWHUYLHZpHV

)pYULHU 2XDJDGRXJR	
/\GLD 2XpGUDRJR	&KDUJpH GH 3URJUDPPH
0 'DQLHO '\$ +,(1	&RRUGRQQDWHXU *pQpUDO GX 5pVHD
0 \$EGRXOLP 28('5\$2*2	FRPSWDEOH
+ \SSROLWH 2XDQJUDZD	'LUHFWHXU HW DFWHXU GH 105RURXS
0DWKLDV 7DQNRDQR	&RPPLVVDLUH j OD &RPPLVVLRQ (OHF
6LDND &RXOLEDO\	,QGpSHQDQWLUH GH OD VRFLpWp F
5(62&,'(6HFUpWDLUH ([pFXWLI	
)pYWLH	
%RULV 2XpGUDRJR	3UpVLGHQW GX &RQVHLO 1DWLRQDO
\$ODLQ 1\$&28/0\$	

\$QQH[H

\$EU_pYLDWLRQV

&(1,	&RPPLVVLRQ (OHFWRU _{DOH} 1DWLRQ _{DOH} ,QG _p SHQG _{DQW}
'3	'RFXPHQW GX 3URMHW
,'+	,QGLFH GH 'pYHORSSHPHQW +XPDLQ
0-&	0DLVRQ GHV -HXQH _V HW GH OD &XOWXUH
26&	2UJDQLVDWLRQ GH OD 6RFL _p W _p &LYLOH
3,%	3URGXLW ,QW _p ULHXU %UXW
318'	3URJUDPPH GHV 1DWLRQ _V 8QLHV SRXU OH 'pYHORSSH
3526	3URJUDPPH GH UHQIRUFHPHQW GHV FDSDFLW _p V GHV 2U 6RFL _p W _p FLYLOH
5\$-	5 _p VHDX \$IULTXH -HXQH _V VH
8(8QLRQ (XUR _S pHQQH