Last-Diverting-Line-Identity

SIP requirement:

Carrier Preselect Operator

eg. 3GPP CDIV service

A ——————————————————> B ————————————————————>C

INVITE
Request-URI -> B
From -> A (Presentation Number)
P-Asserted-Id -> A (Network Number)

INVITE
Request-URI -> C via Carrier Preselect Operator
From -> A (Presentation Number)
P-Asserted-Id -> A (Network Number)
History-Info -> B (Presentation Number) index=1
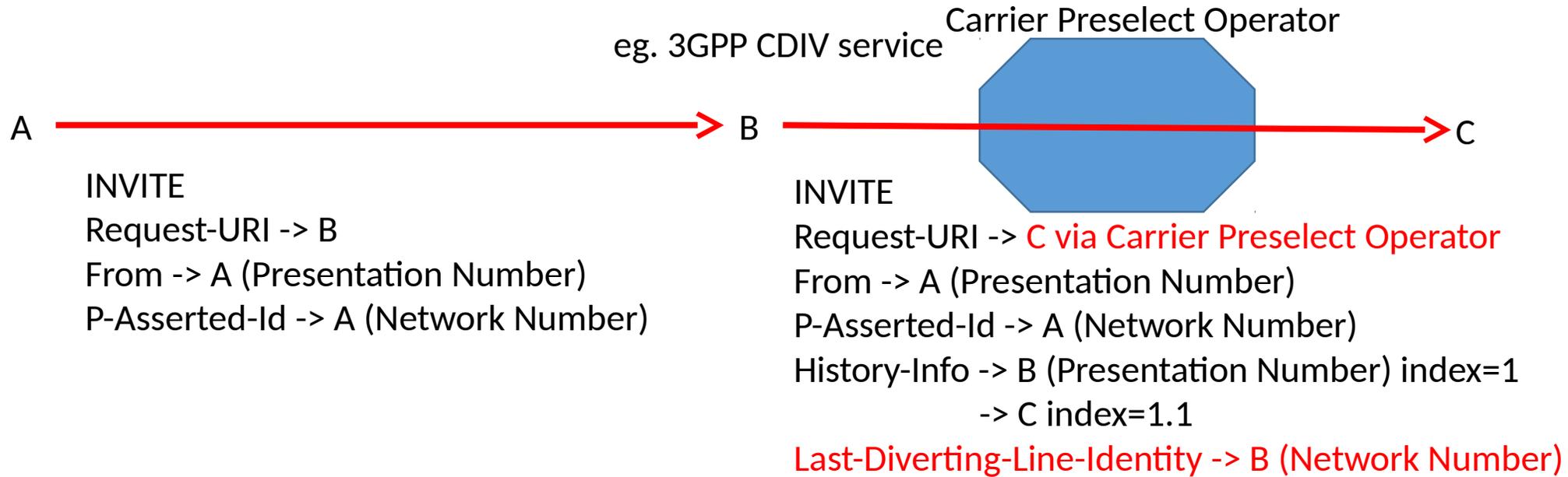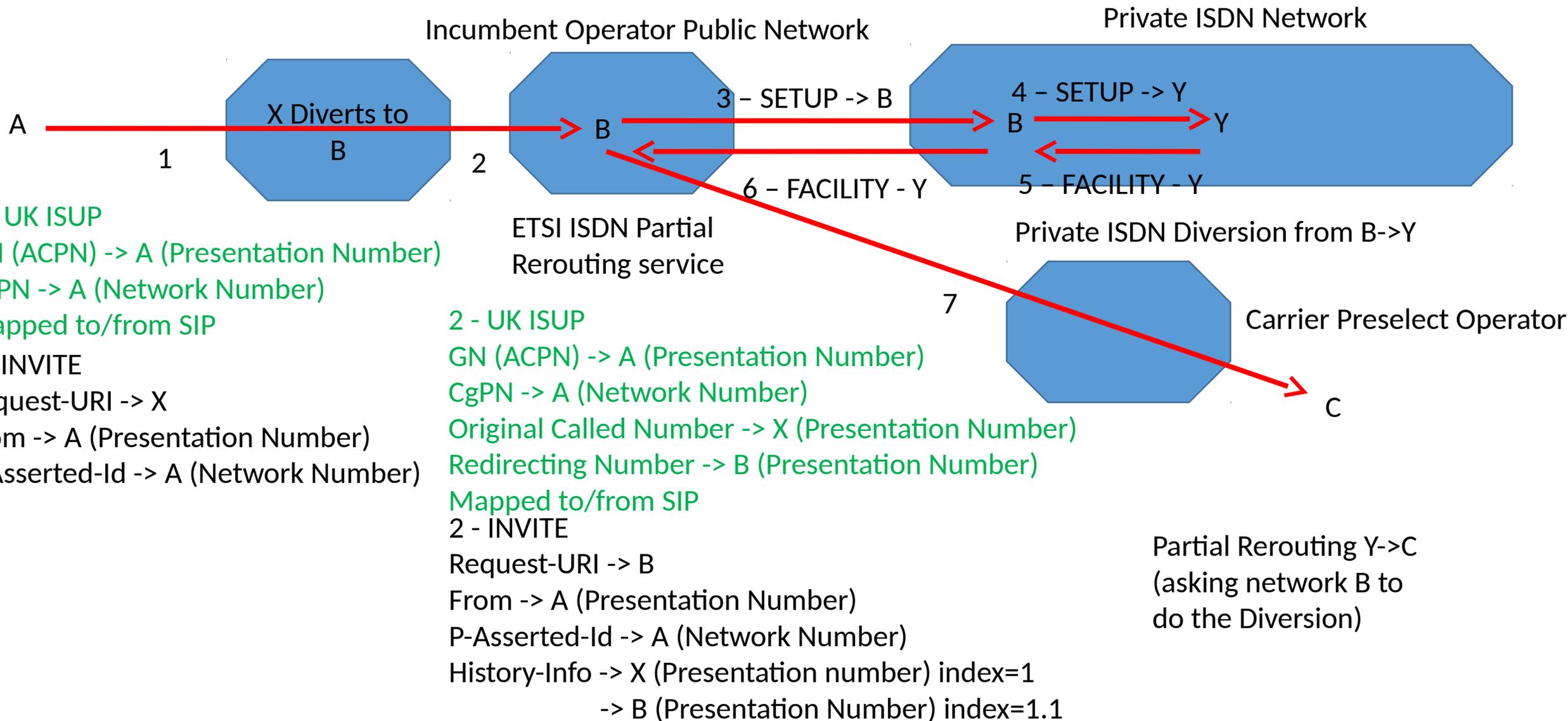   -> C index=1.1
Last-Diverting-Line-Identity -> B (Network Number)

Last-Diverting-Line-Identity – allows Carrier Pre-Select Operator
on the diverted leg to bill and verify service for B.

Last-Diverting-Line-Identity
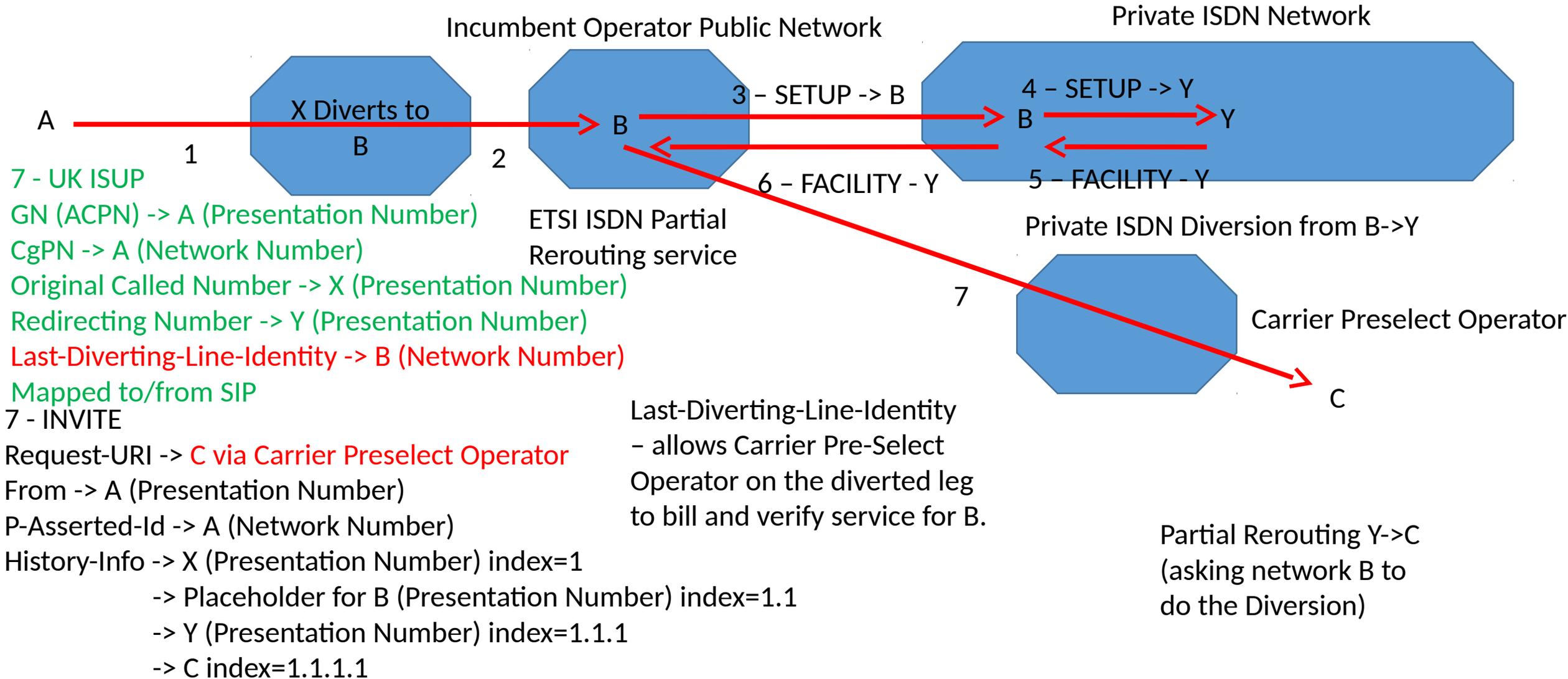
Worse case ETSI ISDN / UK ISUP interworking requirement – we have to deal with – slide 1:

Incumbent Operator Public Network

Private ISDN Network

X Diverts to B

A

1

2

B

3 – SETUP -> B

4 – SETUP -> Y

B

Y

6 – FACILITY - Y

5 – FACILITY - Y

ETSI ISDN Partial Rerouting service

Private ISDN Diversion from B->Y

7

Carrier Preselect Operator

C

1 - UK ISUP
GN (ACPN) -> A (Presentation Number)
CgPN -> A (Network Number)
Mapped to/from SIP

1 - INVITE
Request-URI -> X
From -> A (Presentation Number)
P-Asserted-Id -> A (Network Number)

2 - UK ISUP
GN (ACPN) -> A (Presentation Number)
CgPN -> A (Network Number)
Original Called Number -> X (Presentation Number)
Redirecting Number -> B (Presentation Number)
Mapped to/from SIP
2 - INVITE
Request-URI -> B
From -> A (Presentation Number)
P-Asserted-Id -> A (Network Number)
History-Info -> X (Presentation number) index=1
          -> B (Presentation Number) index=1.1

Partial Rerouting Y->C
(asking network B to
do the Diversion)

Last-Diverting-Line-Identity

Worse case ETSI ISDN / UK ISUP interworking requirement – we have to deal with – slide 2:

Incumbent Operator Public Network

Private ISDN Network

A

1

X Diverts to B

2

B

3 – SETUP -> B

B

4 – SETUP -> Y

Y

6 – FACILITY - Y

5 – FACILITY - Y

ETSI ISDN Partial
Rerouting service

Private ISDN Diversion from B->Y

7

Carrier Preselect Operator

C

7 - UK ISUP
GN (ACPN) -> A (Presentation Number)
CgPN -> A (Network Number)
Original Called Number -> X (Presentation Number)
Redirecting Number -> Y (Presentation Number)
Last-Diverting-Line-Identity -> B (Network Number)
Mapped to/from SIP

7 - INVITE
Request-URI -> C via Carrier Preselect Operator
From -> A (Presentation Number)
P-Asserted-Id -> A (Network Number)
History-Info -> X (Presentation Number) index=1
         -> Placeholder for B (Presentation Number) index=1.1
         -> Y (Presentation Number) index=1.1.1
         -> C index=1.1.1.1
Last-Diverting-Line-Identity -> B (Network Number)

Last-Diverting-Line-Identity
– allows Carrier Pre-Select
Operator on the diverted leg
to bill and verify service for B.

Partial Rerouting Y->C
(asking network B to
do the Diversion)

Last-Diverting-Line-Identity

Why not use History-Info:

History–Info used for mapping to Original Called Number
/ Redirecting Number – 3GPP/IETF – these parameter are used for display and have no screening indicator.
Unclear where you would place the 'network number' information in the index structure of History-Info
when we already have the Presentation Number information in the structure.
At the boundary of the UK public network the Last-Diverting-Line-Identity – needs to be removed.

Last-Diverting-Line-Identity

What next:

I would like to get this ID into an informational RFC

Technical comments received on ID itself:

= should be =/