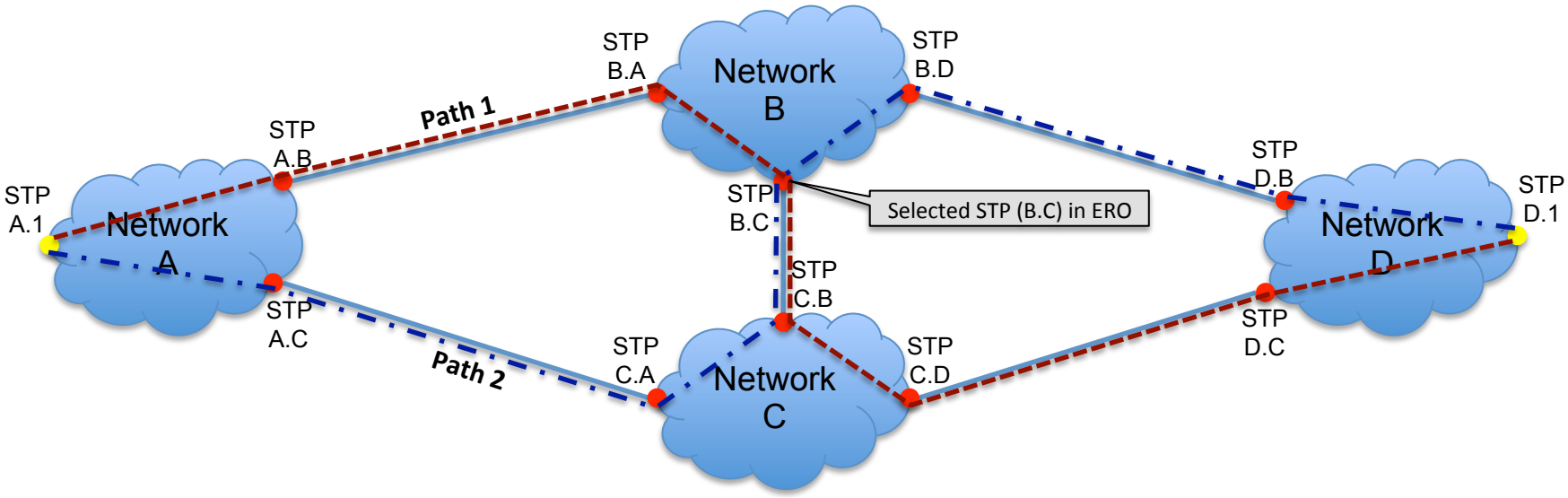
Problem statement: EROs can be ambiguous with implicit bi-directional STPs



Request

A-Point = A.1

Z-Point = D.1

ERO = A.1, **B.C**, D.1

Valid Path Solutions

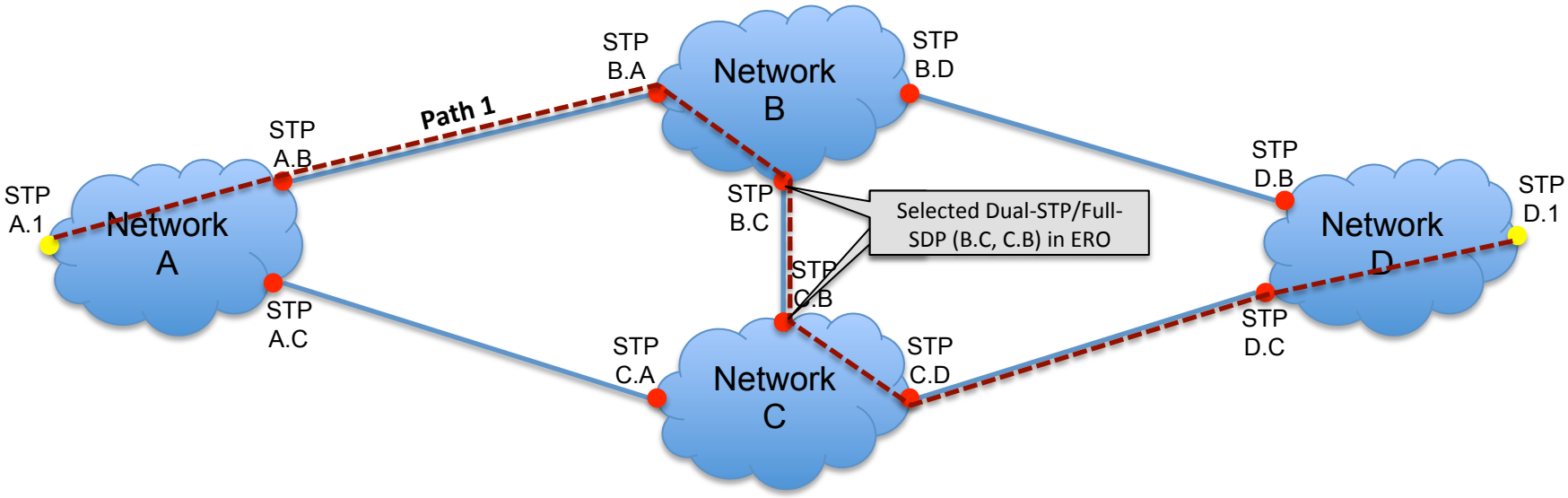
Path 1: A.1, A.B, B.A, **B.C**, C.B, C.D, D.C, D.1

Path 2: A.1, A.C, C.A, C.B, **B.C**, B.D, D.B, D.1

Terminating* STP Intermediate* STP

** As per request instance*

Solution Option 1: Use Dual-STPs/Full-SDPs for EROs



Request

A-Point = A.1

Z-Point = D.1

ERO = A.1, **B.C, C.B**, D.1

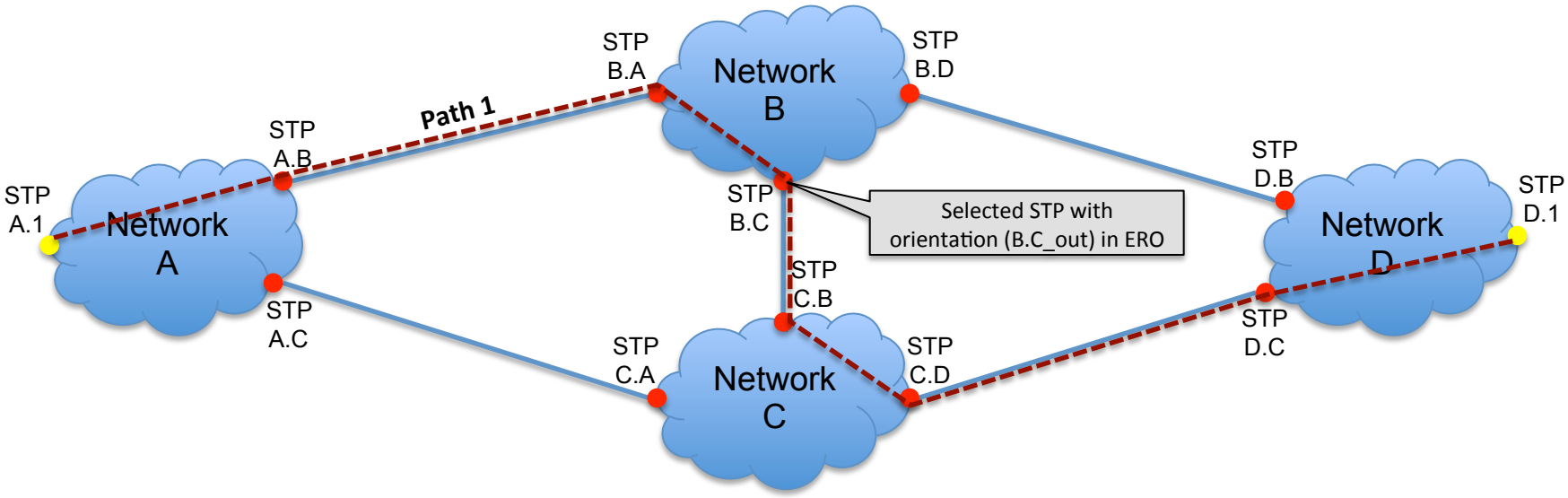
Valid Path Solutions

Path 1: A.1, A.B, B.A, **B.C, C.B**, C.D, D.C, D.1

Terminating* STP Intermediate* STP

** As per request instance*

Solution Option 2: Add Polarity/Orientation to STPs



Request

A-Point = A.1_in

Z-Point = D.1_out

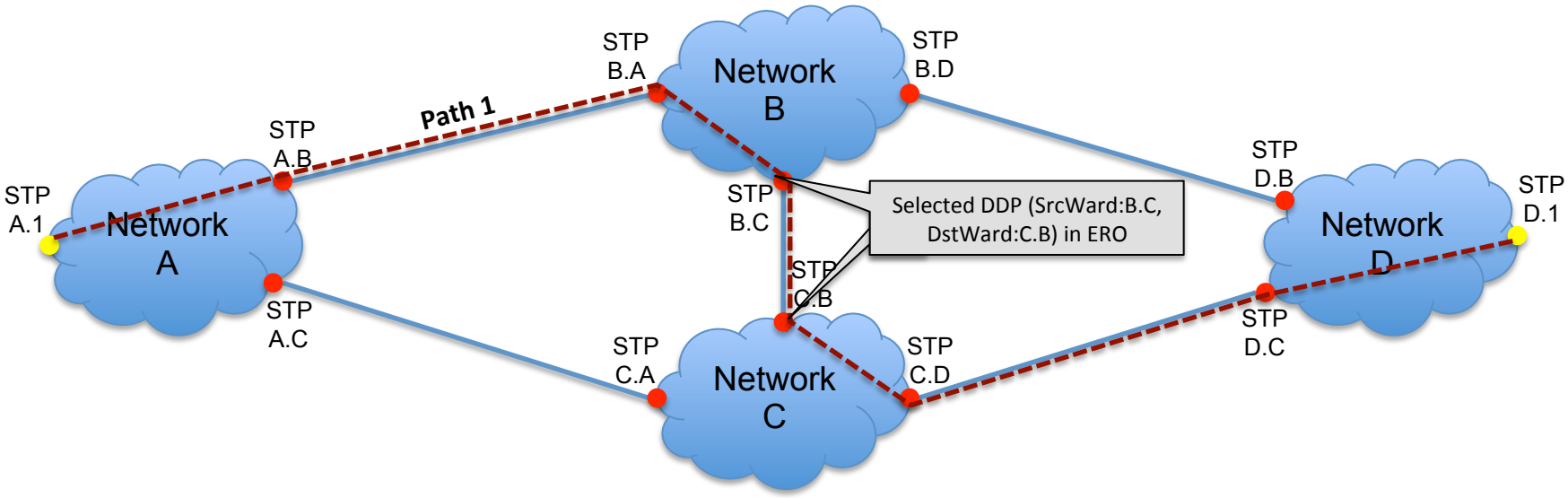
ERO = A.1_in, **B.C_out**, D.1_out

Valid Path Solutions

Path 1: A.1_in, A.B_out, B.A_in, **B.C_out**, C.B_in, C.D_out, D.C_in, D.1_out

** As per request instance*

Solution Option 3: Use Directional+ SDPs (Directed Demarcation Point (DDP)) for EROs



Request

A-Point = A.1

Z-Point = D.1

ERO = A.1,
DDP(SrcWard:B.C, DstWard:C.B),
D.1

Valid Path Solutions

Path 1: A.1, DDP(SrcWard:A.B, DstWard:B.A),
DDP(SrcWard:B.C, DstWard:C.B),
DDP(SrcWard:C.D, DstWard:D.C), D.1

Terminating* STP Intermediate* STP

+ *Direction is relative to source/destination STP*

* *As per request instance*