

# DHCPv6 option for "4rd" (IPv4 Residual Deployment across IPv6)

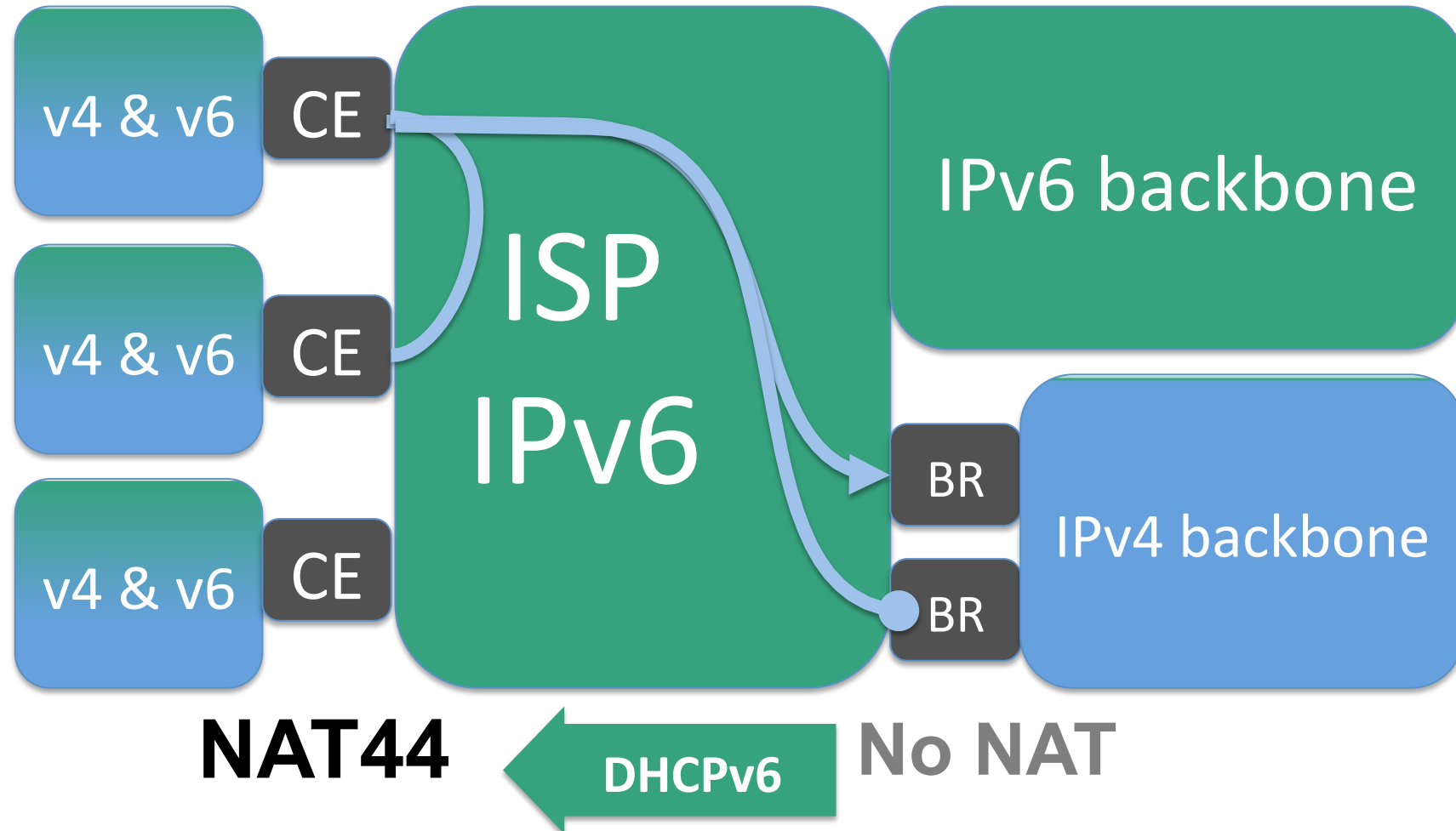
## draft-despres-intarea-4rd-01

- Rémi Després (RD-IPtech) - Ed.
- Satoru Matsushima (SoftBank)
- Tetsuya Murakami (IP Infusion)
- Ole Troan (Cisco)

# Problem space matrix

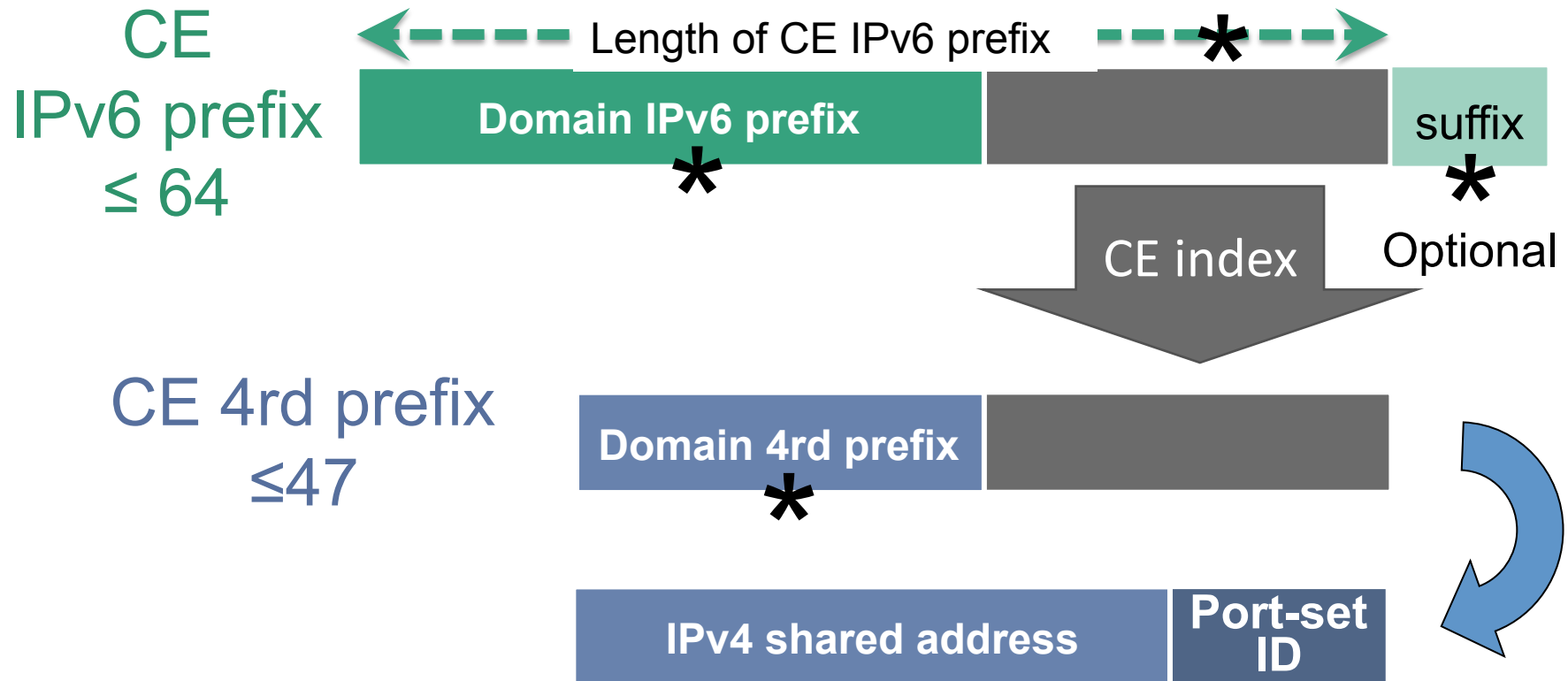
	IPv6 across v4	IPv4 across v6 + v4 address sharing
Stateful	RFC5571 (L2TP) ✓	DS-Lite (draft) ✓
Stateless	RFC5969 (6rd) ✓	<b>4rd</b> (to be standardized)

# 4rd architecture



**Static v4 address sharing**

# 4rd Mapping rules



\* Parameter

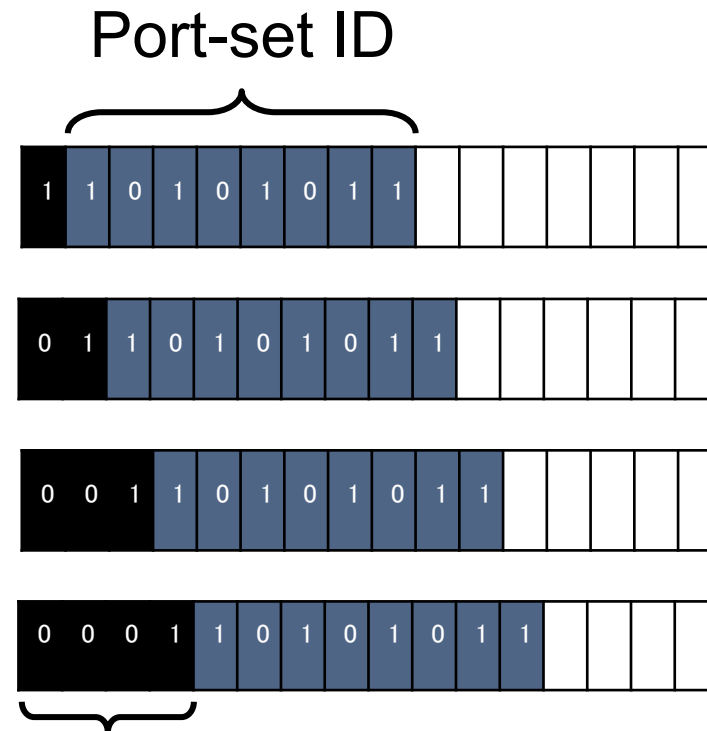
Example: `2001:db8:cdab::/48` => `192.0.2.205`, `0xAB`

# Mapping-rule parameters

Parameter
Length of CE IPv6 prefix
Domain IPv6 prefix
Domain 4rd prefix
Domain IPv6 suffix (optional)
BR IPv6 address (anycast)

# No parameter needed to assign port sets

One Port set ID  
→ 4 port prefixes



4 heads: 1, 01, 001, 0001

- No CE has high-value ports 0-4095
- All other ports are assigned

# DHCP format(s) needed

- The draft includes a proposal but with several questions still open
- More alignment with dhc WG usual formats seems desirable
- Work with dhc WG experts is expected

# Questions?