IPv6 Segment Endpoint Option

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Motivation

- Need to convey instructions to **selected** segment endpoints
  - Possibly for Service Function Chaining

- For example
  - A path contains 5 endpoints
  - Instruction A needs to be delivered to endpoint 3
  - Instruction B needs to be delivered to endpoint 4

Solution

- Put a Destination Options Header in front of the Routing header
  - Processed by each segment endpoint
- Put a Segment Endpoint Option in the Destination Options header
  - Segment Endpoint Option contains a Segments Left field
    - Decremented at each segment endpoint
  - Segment Endpoint Option contains a list of containers
    - Each container contains a Segment ID and IP options
    - IP Options are processed when Segment ID is equal to Segments Left

Next Steps

- Call for adoption in 6man WG