draft-ietf-spring-resiliency-use-case-00

Pierre Francois, IMDEA Networks Institute
Clarence Filsfils, Cisco Systems
Bruno Decraene, Orange
Rob Shakir, BT

IETF 90, SPRING WG

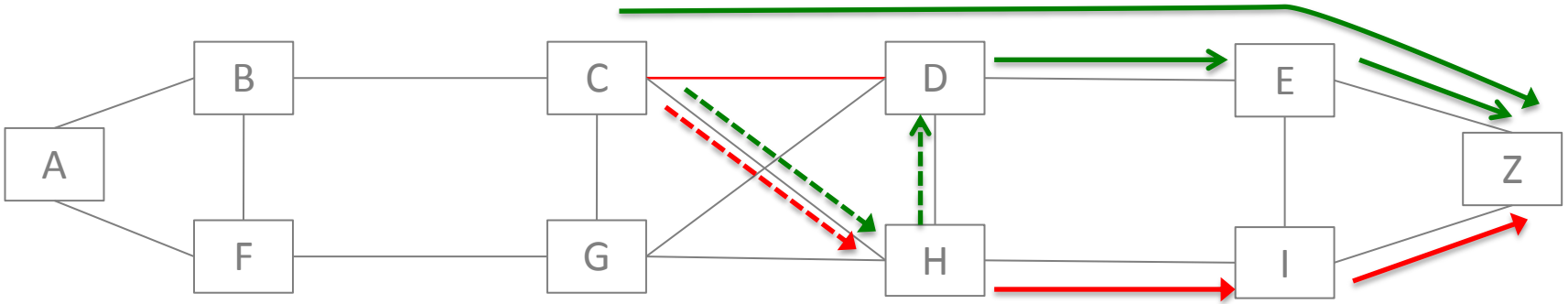
Objective

- Analyze how resiliency can be achieved in SPRING-like networks
  - Illustrate various approaches
    - Path protection (End to end)
    - Unmanaged local protection (FRR)
    - Managed local protection (FRR)
  - Discuss co-existence of approaches in a network

- Main diff since last presented in IETF 89 (London)
  - Completely solution agnostic
  - Inclusion of different bypass protection approaches

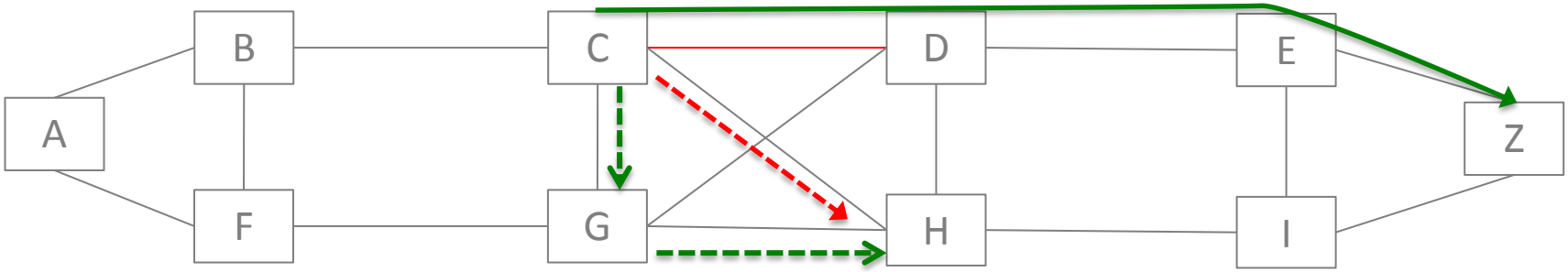
Unmanaged local protection

- Bypass or shortest path protection
  - Bypass: steer traffic to the **next-hop**
  - Shortest path protection: steer traffic to the **destination**



Managed local protection

- When default protection does not fit
  - E.g. CD and CH are part of the same SRLG. → SP wants C to install backup [H], oif G, in order to avoid CH
  - Other examples in draft-ietf-rtgwg-lfa-manageability



- Managed backup paths could stem from
  - Explicit path configuration, or
  - high-level constraints
- Applicable to both bypass and shortest path local protection.

Summary of current approaches

Thank you!

pierre.francois@imdea.org
cfilsfil@cisco.com
bruno.decraene@orange.com
rob.shakir@bt.com