



**Asia-Pacific  
Economic Cooperation**



# Data Management, Technology and Cybersecurity – An Overview

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Session C-1

# DATA MANAGEMENT, TECHNOLOGY AND CYBERSECURITY – AN OVERVIEW

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## ■ Problems and challenges

- How “financial market infrastructures” help growth while maintaining stability?
  - Traditional “Financial Market Infrastructures (FMIs)”
  - Financial Intermediaries
  - “new FMIs”

## ■ What we need to determine?

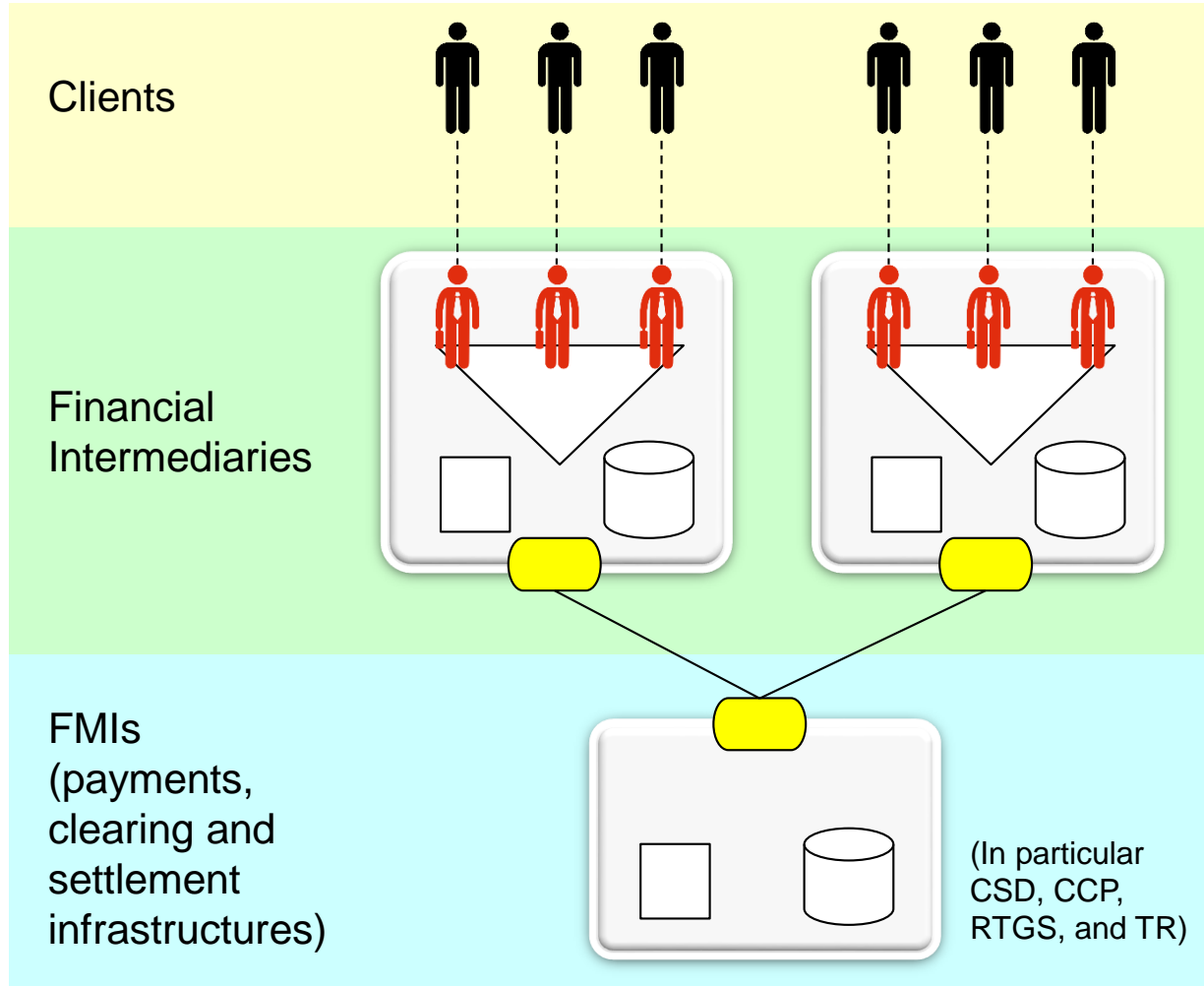
- How we can manage distributed key applications, storage, and connections?
- How “new FMIs” scalable?
- How we can harmonize the regulatory approach, requirements, formats?

# What are the process that can change in the future?

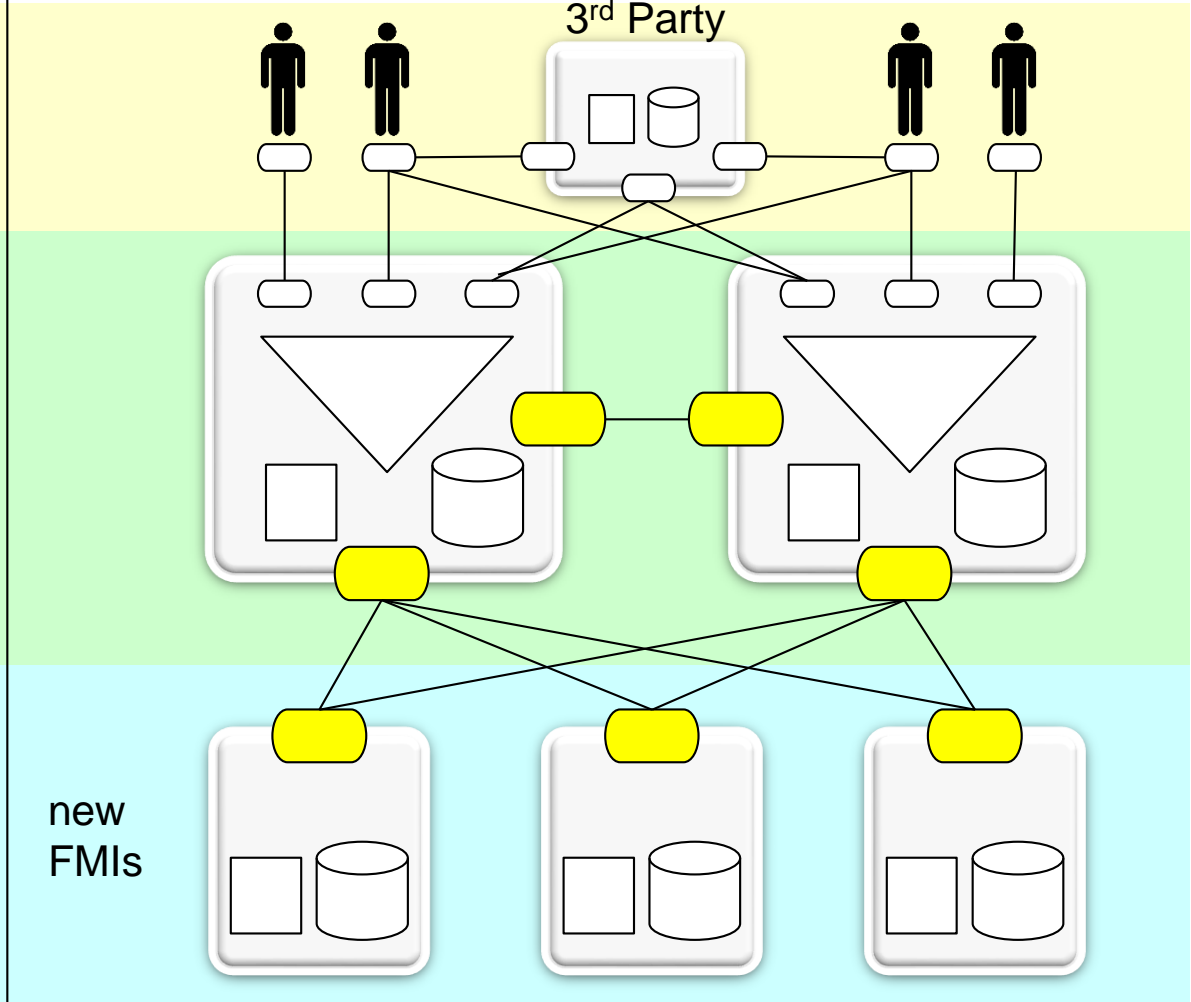
■ Exchange of Assets

■ Sharing Key Data

Traditional Process  
- Hierarchical Structure -



Emerging Process  
- Distributed Applications, Storages, Connections -



# What are the process that can change in the future?

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## ■ Where are the emerging process applicable?

- Developed market environment where trusted FMIs are already in place.
- Emerging market environment where trusted FMIs are yet established.

## ■ What are the merits?

- Disrupt current process.
- Provide inclusive services.

## ■ What are the risks?

- Increased number of interface ports increase vulnerability for cyber security?
- Distributed process make hard to monitor the health of entire system?

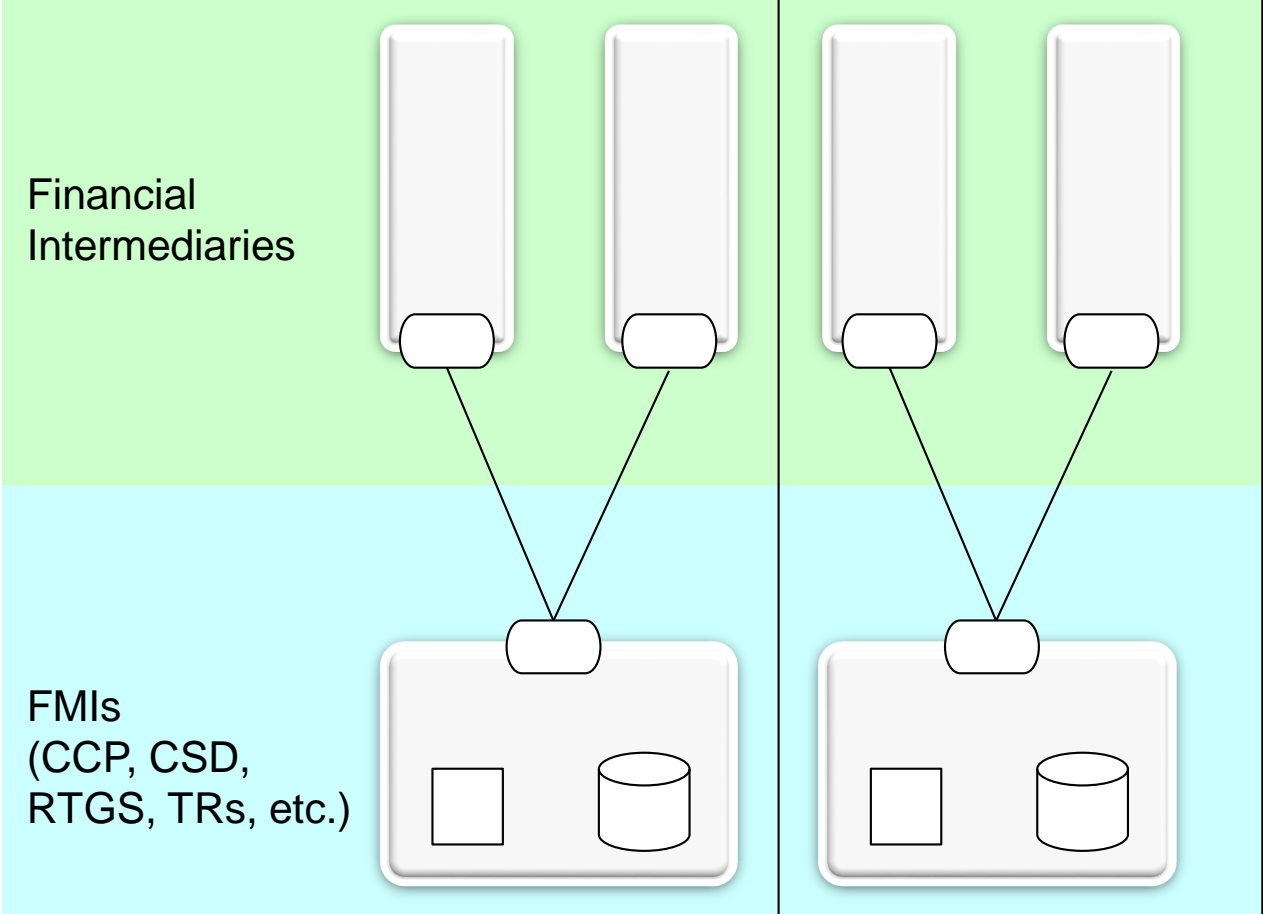
# How economies address cross-border process?

- Exchange of Assets
- Sharing Key Data

## Traditional Process

Jurisdiction A

Jurisdiction B

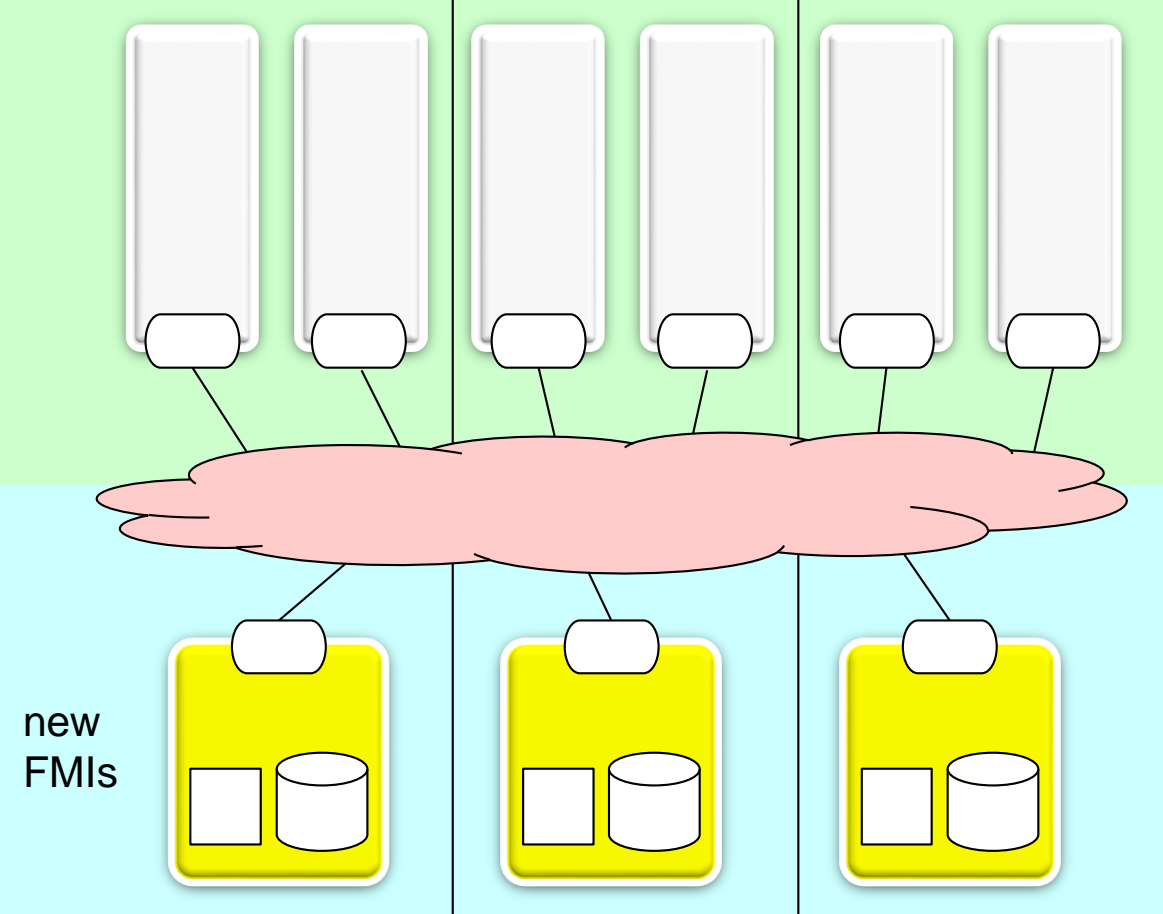


## Emerging Process

Jurisdiction A

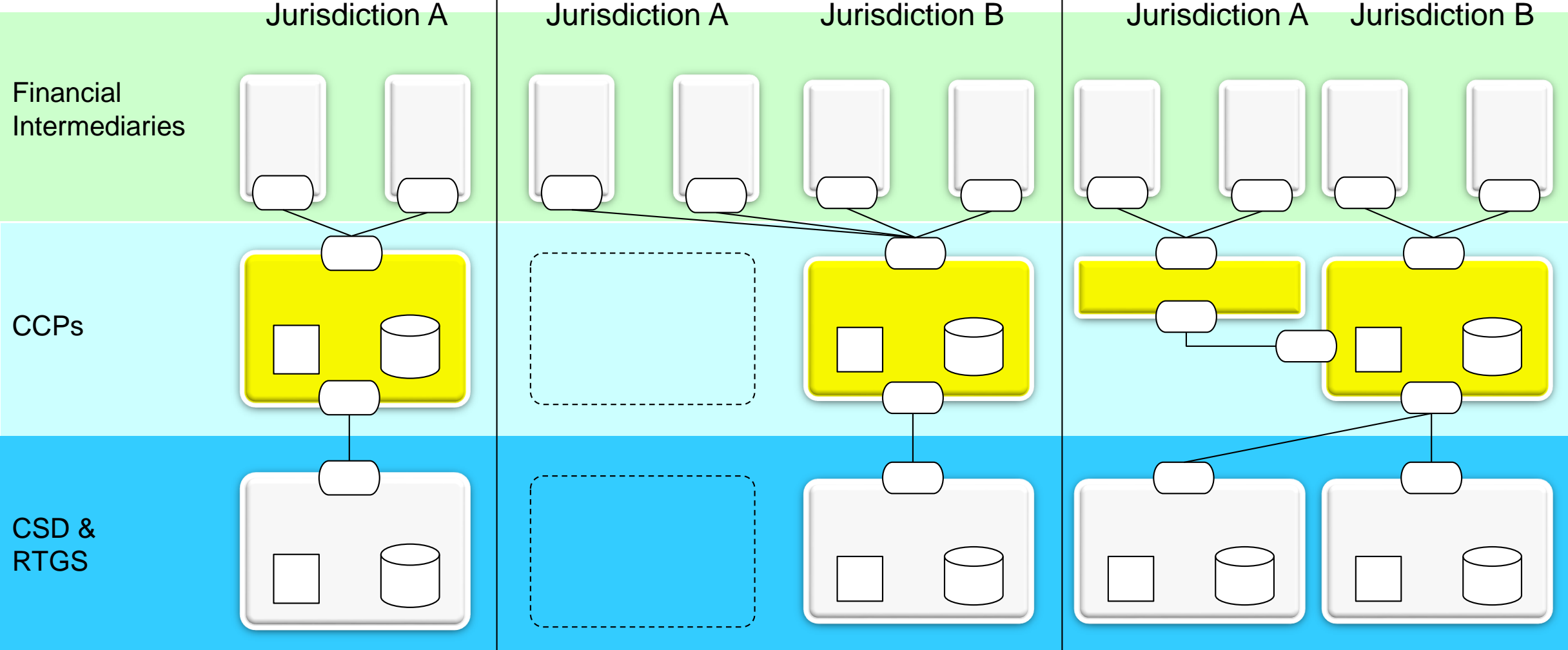
Jurisdiction B

Jurisdiction C



# How central counterparties' functions are provided?

■ **What to have in common?** Traditional Process (e.g. listed markets)



# What APEC economies are expected to address?

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- Scope of “financial market infrastructures” (including “new FMIs”)
- Sharing the data cross border to best use of “fmis”
- Utilizing the part of “fmis” across the border for economies of scale

**NRI**

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**Dream up the future.**





**THANK YOU**