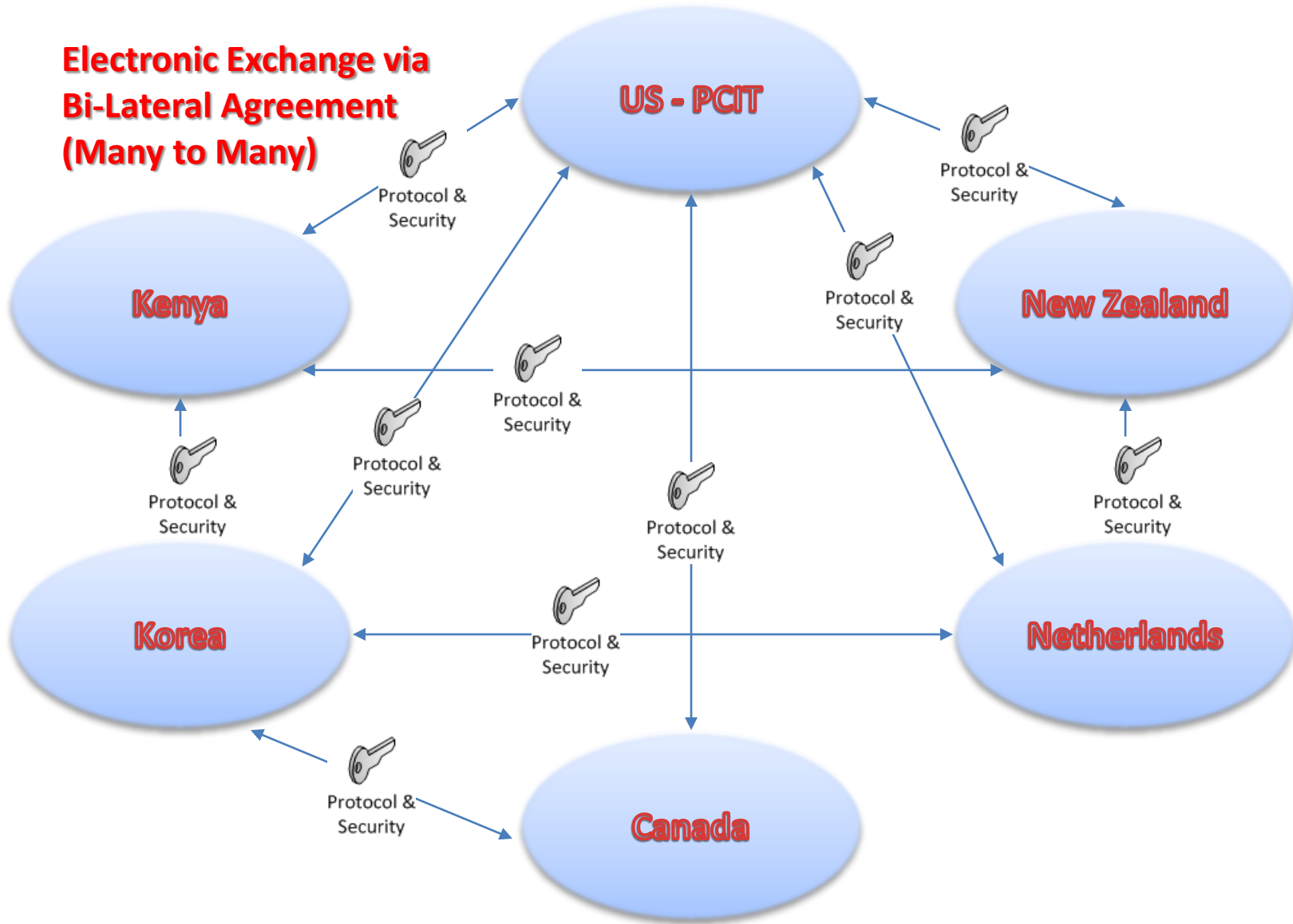
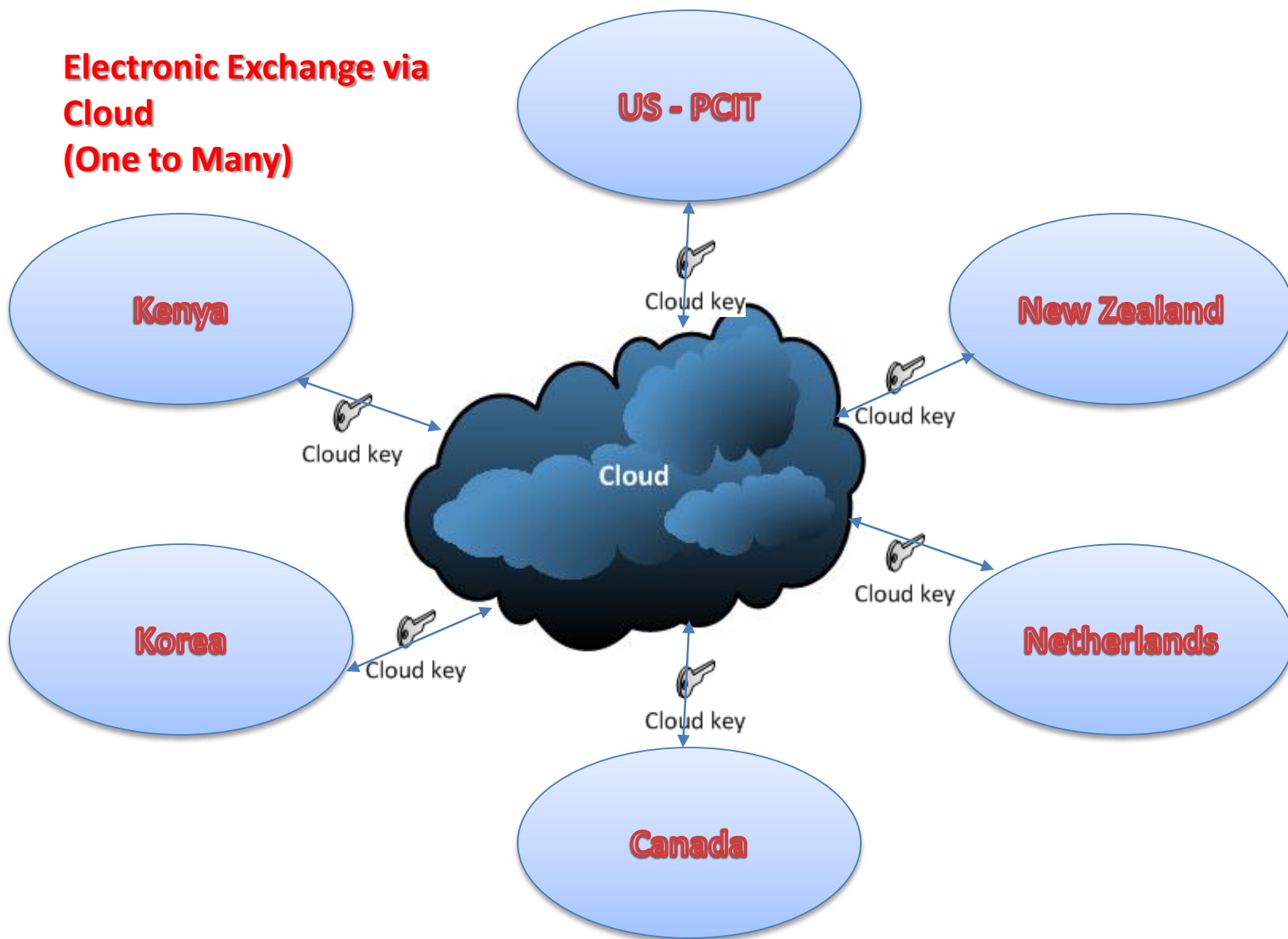


**Electronic Exchange via  
Bi-Lateral Agreement  
(Many to Many)**



**Electronic Exchange via  
Cloud  
(One to Many)**



## Electronic Exchange Benefits

- Controlled by the IPPC
- No need for bilateral agreements defining exchange parameters and security requirements.
- Discourages unilateral changes in data format – All countries would adhere to the ISPM-12 data format and definitions
- Ensure reliable 24x7 availability – the service would be 24/7/365 access with redundancies in place to ensure exceptional backup and recovery
- Data security and secure transmission of data – unique keys ensure that data is accessible by only the intended country. Further the transitory nature of the data in the cloud ensures that only the intended country has access
- Provide for a common forum for discussion – as changes and enhancements to the service are considered, all participants would have equal input into the vetting process

## Estimated Costs to Setup Cloud And Process Traffic

- Initial Cost is Estimated at approximately **\$9,000**. This would enable 5 countries to exchange certificate data.
- Each additional country would an additional one-time fee of about **\$300**.
- Process costs are dependent upon the **Monthly** traffic. The more traffic the lower the rate.
- Calculations are based on an **average 4K** certificate message.
- Cost breakdown is based on consolation with industry:
  - Up To 400,000,000 bytes (100,000 4K messages) (\$14,000) = 14.0 cents/message
  - Thru 700,000,000 bytes (175,000 4K messages) (\$17,850) = 10.2 cents/message
  - Thru 1,000,000,000 bytes (250,000 4K messages) (\$21,000) = 8.4 cents/message
  - Thru 2,000,000,000 bytes (500,000 4K messages) (\$26,250) = 5.3 cents/message
  - Over 2,000,000,000 bytes negotiated
- Assume the USA does **50,000** certificates/month and assume that's 10% of the worldwide traffic then the worldwide traffic would be **500,000**/month. So at **\$26,250**/month that's, **\$315,000**/year.