



**CARIBBEAN TELECOMMUNICATIONS UNION**

**22<sup>ND</sup> MINISTERIAL ICT STRATEGIC SEMINAR**

**September 30, 2024**

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**ECHOSTAR**



***“THE BEST WAY TO PREDICT THE  
FUTURE IS TO INVENT IT”***

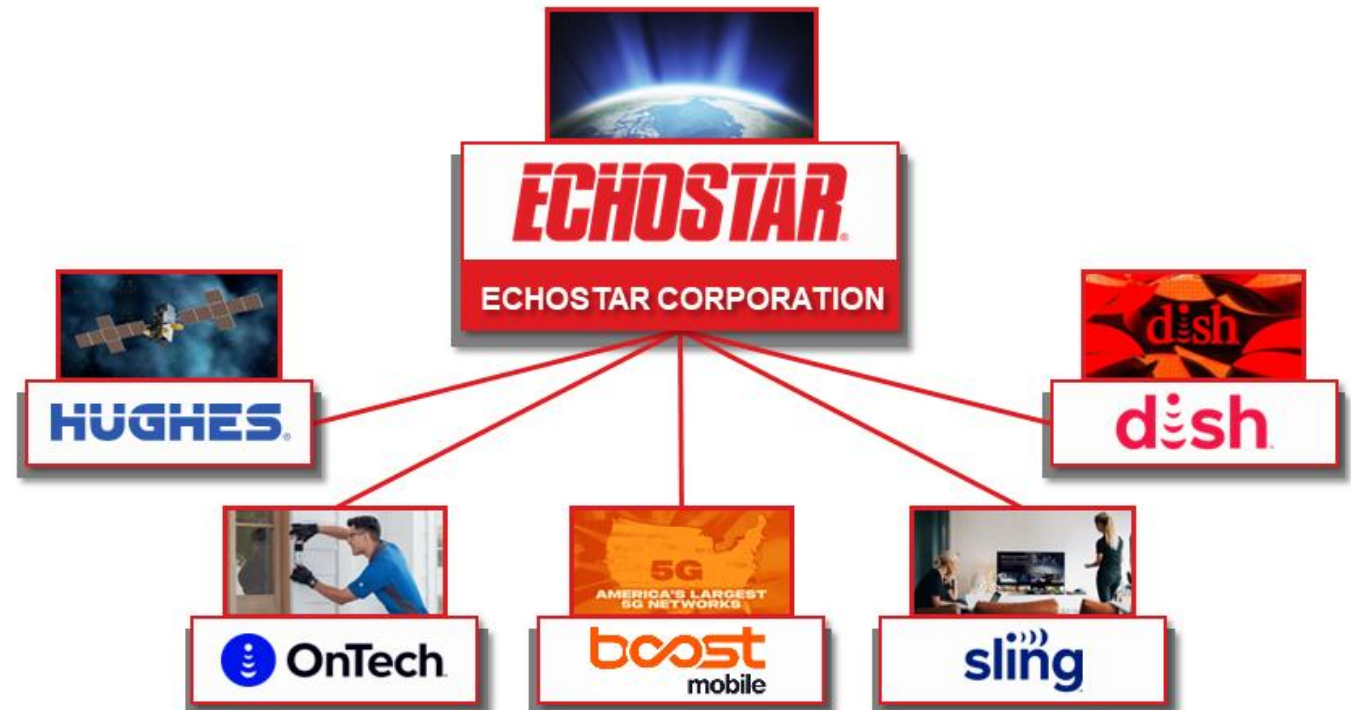
***ALAN KAY***

# About EchoStar



## We are a global powerhouse

- Multibillion-dollar public company (Nasdaq:SATS)
- Satellite owner/operator with a fleet of 10 owned and leased Ku-, Ka- and S-band geostationary satellites
- World's #1 consumer high-speed satellite Internet service, Hughesnet®, with over 1.5 million subscribers in the Americas
- Leading global provider of satellite broadband technology and services—approximately 50% share of the global VSAT market with millions of terminals of all types shipped to customers in over 100 countries.



# EchoStar and DISH combined strengths



## Global Operations and Support

**HughesNet.** Millions of users in the Americas

**HughesON.** Serving over 500K enterprise and government locations

**EchoStarMobile.** Delivering IoT services throughout Europe

Services Available in **43** countries

## Technology

**3GPP** 3GPP based LEO systems

**OneWeb**  
Global deployment, integration, operation, and support

GW design, integration of Qualcomm technology **lte**

Terminal development including ESA flat panel antenna

**Globalstar** **3G**  
Developed and delivered 2<sup>nd</sup> generation ground station RAN

## Global Spectrum Rights

**ECHOSTAR** | Lyra **5G**

**Truly transformative wideband LEO-based 5G NTN capability**

- Global S-band spectrum
- LEO constellation of hundreds
- 5G release 17 and beyond

Global legal and regulatory strengths

## 5G Core, OSS/BSS, US S-Band

**5G** Next gen, Cloud native 3GPP core network

**5G** Scalable, catalog driven, OSS/BSS services

**USA** S-band spectrum rights

**dish** Millions of subscribers

**boost mobile** Nationwide US carrier with millions of 4G/5G wireless subscribers

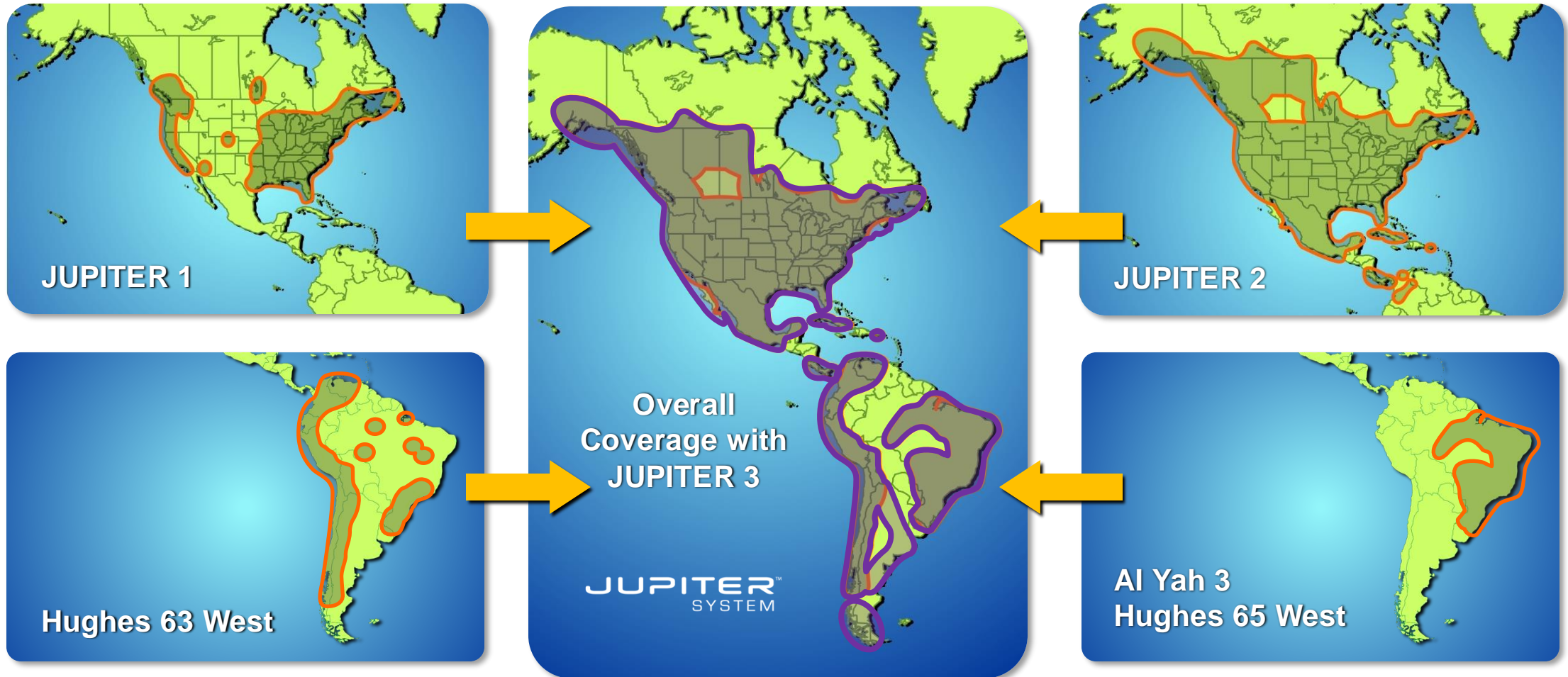
## Global Partnerships



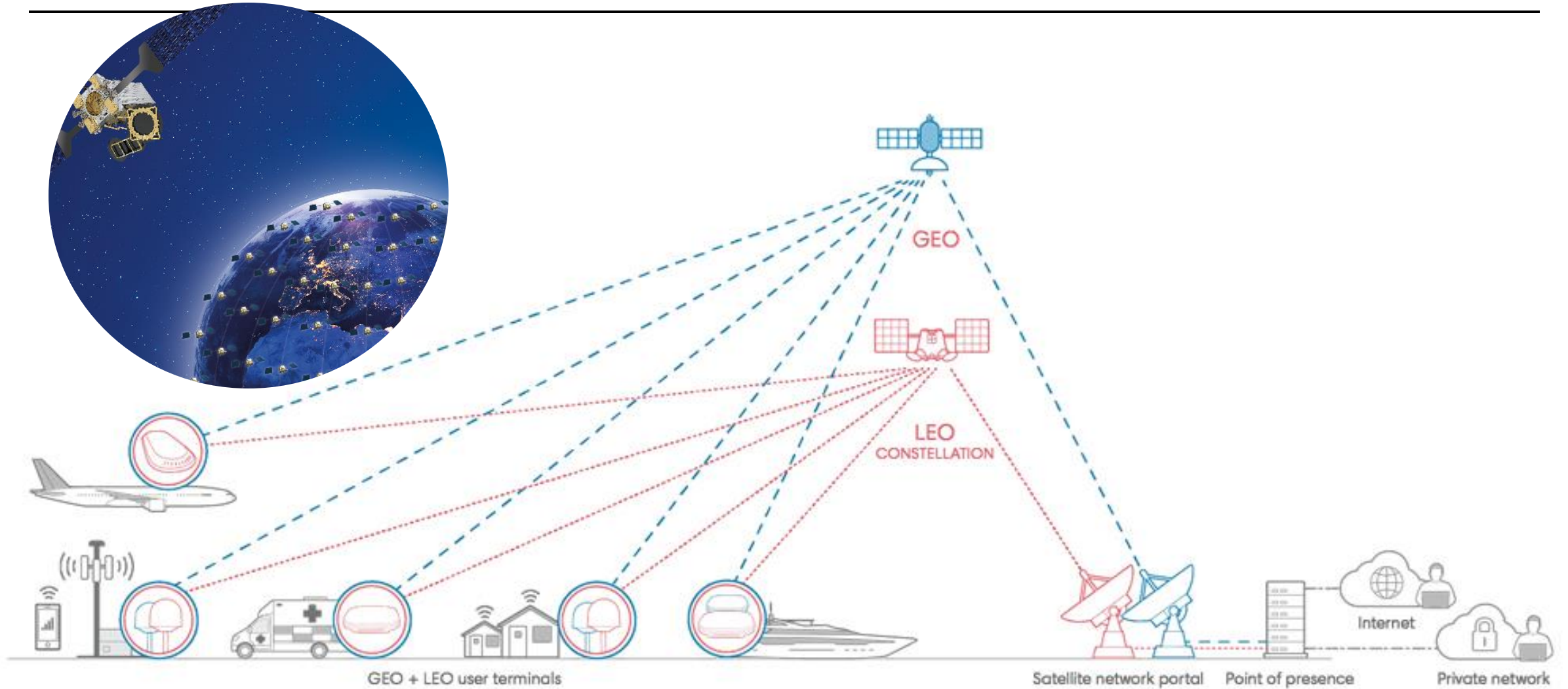


# Largest HTS Network over the Americas

With JUPITER™ 3, the Hughes fleet will reach **80%** of the population, **50+** gateways



# Partnership



# Multi-Orbit and Multi-Transport



**JUPITER**

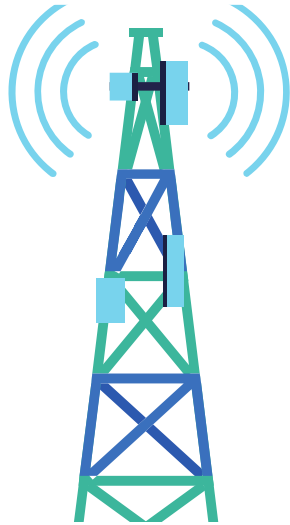
**OneWeb**

**LTE y 5G**



# Cellular Backhaul

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**12,000+ cellular backhaul sites**

Across Africa, Asia, and Latin America



# Non-Terrestrial Networks (NTN)

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- Since the 1990s, companies have developed functionality for handheld devices to connect directly with both satellite and terrestrial networks for seamless connectivity
- This goal was finally achieved in 2022 with Release 17 as 3GPP standardized non-terrestrial networks for the first time
  - NTN offers global coverage where terrestrial networks cannot (including 5G)
  - NTN supports growth in the ever-expanding IoT economy



# Non-Terrestrial Networks Help Bridge the Digital Divide

*by Augmenting Mobile Networks*

## Mobile Communications

### Application(s):

- § Messaging
- § Voice/audio
- § Mobile transactions
- § Social media
- § Email



## Emergency Services

### Application(s):

- § Messaging
- § Voice/audio
- § Drones
- § Low-res video
- § Broadcast
- § Weather



## Asset Tracking

### Application(s):

- § Location reporting
- § Logistics
- § Asset status
- § Environmental monitoring
- § Agriculture & Farming



## Smart Infrastructure

### Application(s):

- § Hydraulics
- § Condition monitoring
- § Environmental monitoring
- § Command and control
- § Configuration/software management
- § Broadcast

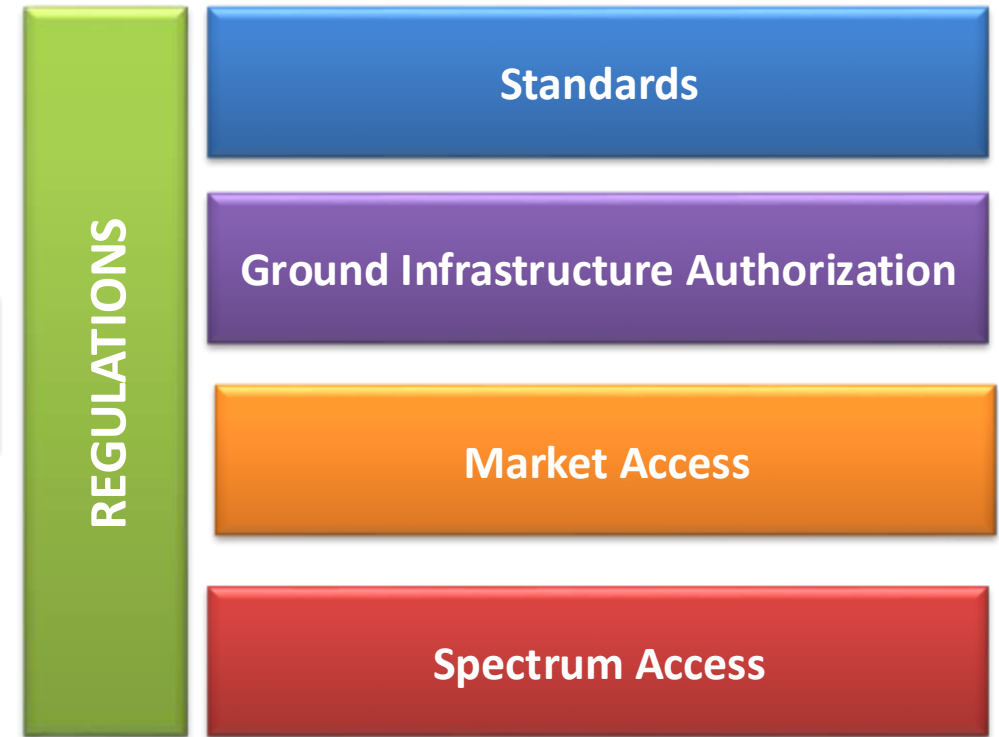


# Potential Regulatory Challenges for D2D

Direct-to Device communications are shaping the future of mobile communications. But as any other satellite technology, in order to develop and to be able to effectively provide solutions for users, a number of regulatory elements have to be in place.



**Globally**



# Conclusions

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- Bridging the digital divide will become a reality with the integration of technologies and the collaboration between industries.
- Regulatory frameworks must focus on ensuring that all users have access, safeguarding the coexistence between existing and future services.



# THANK YOU!

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