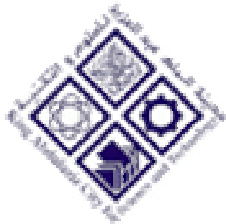


The Internet in Saudi Arabia **(Management View)**

Communications Engineering Technical Exchange Meeting
(CETEM) 2001, 30 April - 2 May
ARAMCO, Al-Dhahran



Dr. Abdullah Ahmed Al-Rasheed

VP for Scientific Research

King Abdulaziz City for Science and Technology



Agenda

- **Brief History**
- **Internet Services Unit**
- **Achievements**
- **Future Plan**
- **Conclusion**



Internet in Saudi Arabia

Brief History

- **Royal decree number 163, dated 24/10/1417H (March 1997)**
 - KACST is in charge of providing Internet services to Saudi Arabia, in coordination with PTT and Ministry of Finance.
 - KACST will develop hardware and software specification needed for the service.
 - KACST is in charge of operation, maintenance, and development of the Internet.



Internet in Saudi Arabia

Brief History

- **Royal decree (cont.)**
 - KACST issues policies and regulations that govern the usage of the service.
 - KACST issues service licenses to qualified ISPs.
 - KACST provides direct connectivity to universities.



Internet in Saudi Arabia

Internet Services Unit

- **KACST established ISU early 1998**
 - Qualifying and Licensing ISPs in KSA
 - Connecting ISPs and Universities in KSA to the International Internet
 - Managing and operating the Network Operation Center
 - Managing and operating the SaudiNIC
 - Preparation of regulations and policies to govern the use of Internet in KSA in coordination with other government agencies
 - Establishing an information security center in cooperation with other government agencies
 - Participate in general awareness programs related to Internet and provide technical advise



Achievements

Qualifying and Licensing ISPs

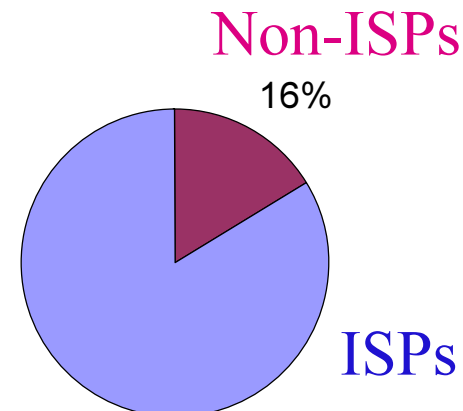
- **Qualification of ISPs announced early 1998**
 - May 1998: 73 companies qualified out of 162.
 - December 1998: 41 companies received licenses.
 - Now operational ISPs: 30
- **Operation began December 1, 1998**
 - Two free months for service trial and setup were given to ISPs.
- **Estimated number of subscribers: ~ 275,000**
- **Estimated number of users: ~ 690,000**
 - User-to-subscriber ratio is estimated at 2.5



Achievements

International Bandwidth

- Connected to three different International providers (USA, Canada, France)
- **465 Mbps** is total available bandwidth
- **120 Mbps** has been sold (~ 25.8 %)
 - 100.31 Mbps to ISPs
 - 19.69 Mbps to Non-ISPs





Achievements

Prices 1999-2000

- **ISPs**

- Installation fees = SR 24 000
- Monthly charges for 512 Kbps:
 - 1999 SR 112 000
 - 2000 SR 61 740 (~ 45%)

- **Universities**

- No installation fees
- Monthly charges for 512 Kbps:
 - 1999 SR 88 000
 - 2000 SR 49392 (~ 45%)





Achievements

Prices 2001

- **ISPs**

- Classes: Monthly charges for 1 Mbps

– 0 - 2	SR 123 480	(0 %)
– 2 - 3	SR 74 088	(40 %)
– 3 - 4	SR 61 740	(50 %)
– 4 - 6	SR 49 392	(60 %)
– 6 - 32	SR 37 044	(70 %)

- **Universities**

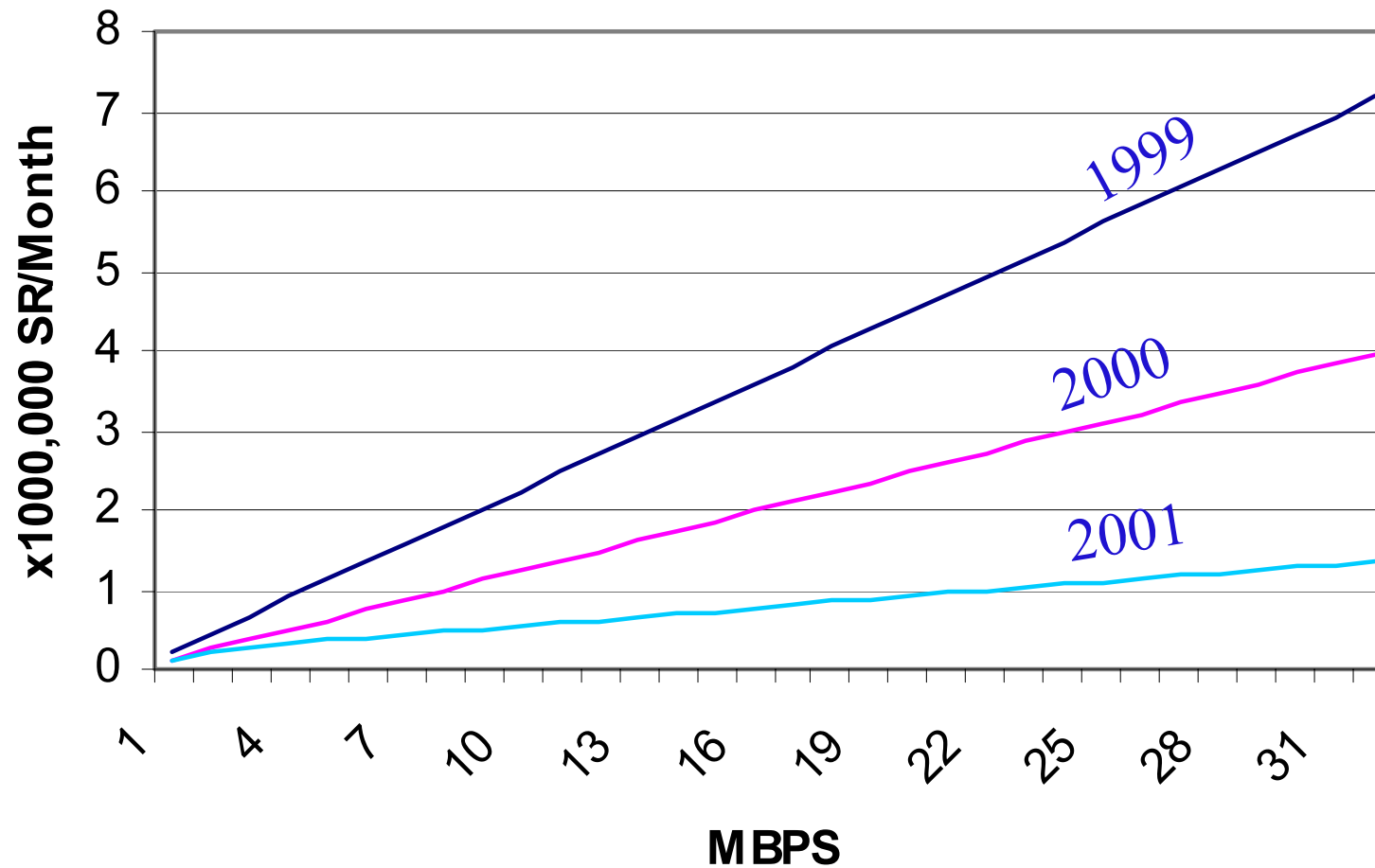
- Classes: Monthly charges for 1 Mbps

– 0 - 1	SR 98 784	(0 %)
– 1 - 2	SR 59 270	(40 %)
– 2 - 3	SR 49 392	(50 %)
– 3 - 4	SR 39 514	(60 %)
– 4 - 8	SR 29 635	(70 %)



Achievements

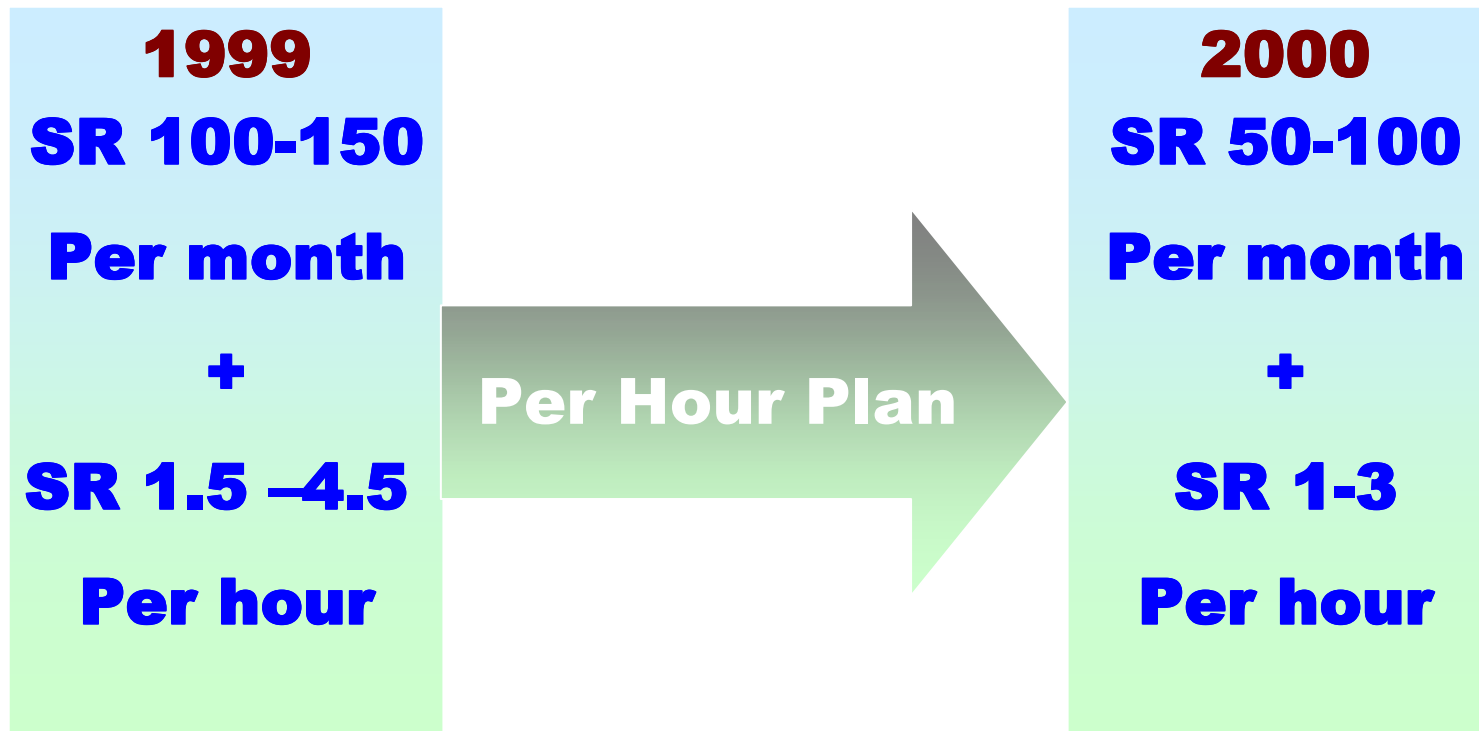
Prices Reduction





Achievements

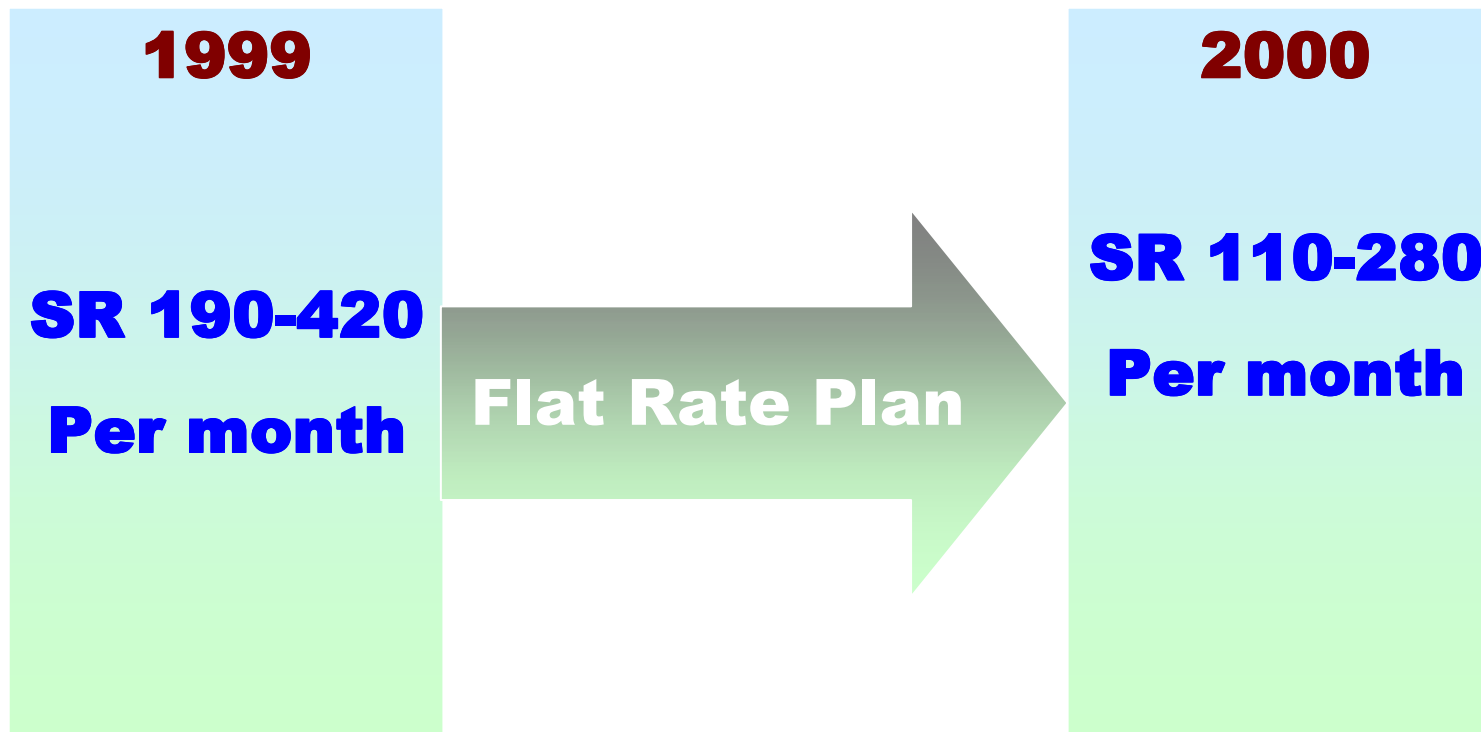
Dialup Accounts





Achievements

Dialup Accounts





Achievements

Network Operation Center (NOC)

- **Hardware & Software**
 - Latest and stable technologies
 - Redundant International links
 - Redundant hardware and software
 - Test lab
- **NOC Helpdesk**
 - 24h x 7d helpdesk
 - Reachable through telephone, fax, email, web,
 - Ticket system
 - Fax gateway
 - Regular announcements
- **ISU is fully responsible for any outages caused by ISU**
 - Service level agreement
 - ISU will compensate any outage (continuous or separate) last for 90 minutes or more per day one full day worth of refund.
- **UPTIME:**
 - ISU : 99.74 %
 - ISU+STC+Providers: 98.93 %



Achievements

SaudiNIC

- **Registering domain names and distributing IP addresses**
- **Domain name registration**
 - can be done in one day
 - online over the web
 - more than 3000 domains registered
 - Searchable over the Internet
 - Follows WIPO recommendations regarding intellectual property rights



Achievements

Information Security Center

- **A member of the Internet Security Committee**
 - Consists of a number of government organizations headed by Ministry of Interior
 - Issues list of blocked sites
 - Internet use and security regulation in KSA
 - Internet use policy in public areas
 - Rules and regulation for anti-hacking (pending for approval)
- **In-house developed programs to automate building the filter list of the ISU proxy**
 - 40 % of blocking requests are done automatically
 - 30 % of unblocking requests are done automatically



Achievements

Information Security Center

- **Security check visits to ISPs**
- **Signed agreements with a number of companies to provide AntiVirus software to local (governmental or commercial) entities**



Achievements

Awareness

- **Organizing a number of meeting with ISPs**
- **Organizing and participating in the ISPs technical committee meetings**
- **Organizing a number of Internet related seminars**
- **Organizing technical seminars with vendors and consultants**
- **Publishing a number of pamphlet about ISU and its services**
- **In process to publish a booklet about the Internet in Arabic**
- **Three web sites (ISU, SaudiNIC, NetSec)**



Achievements

Awareness - ISP link utilization

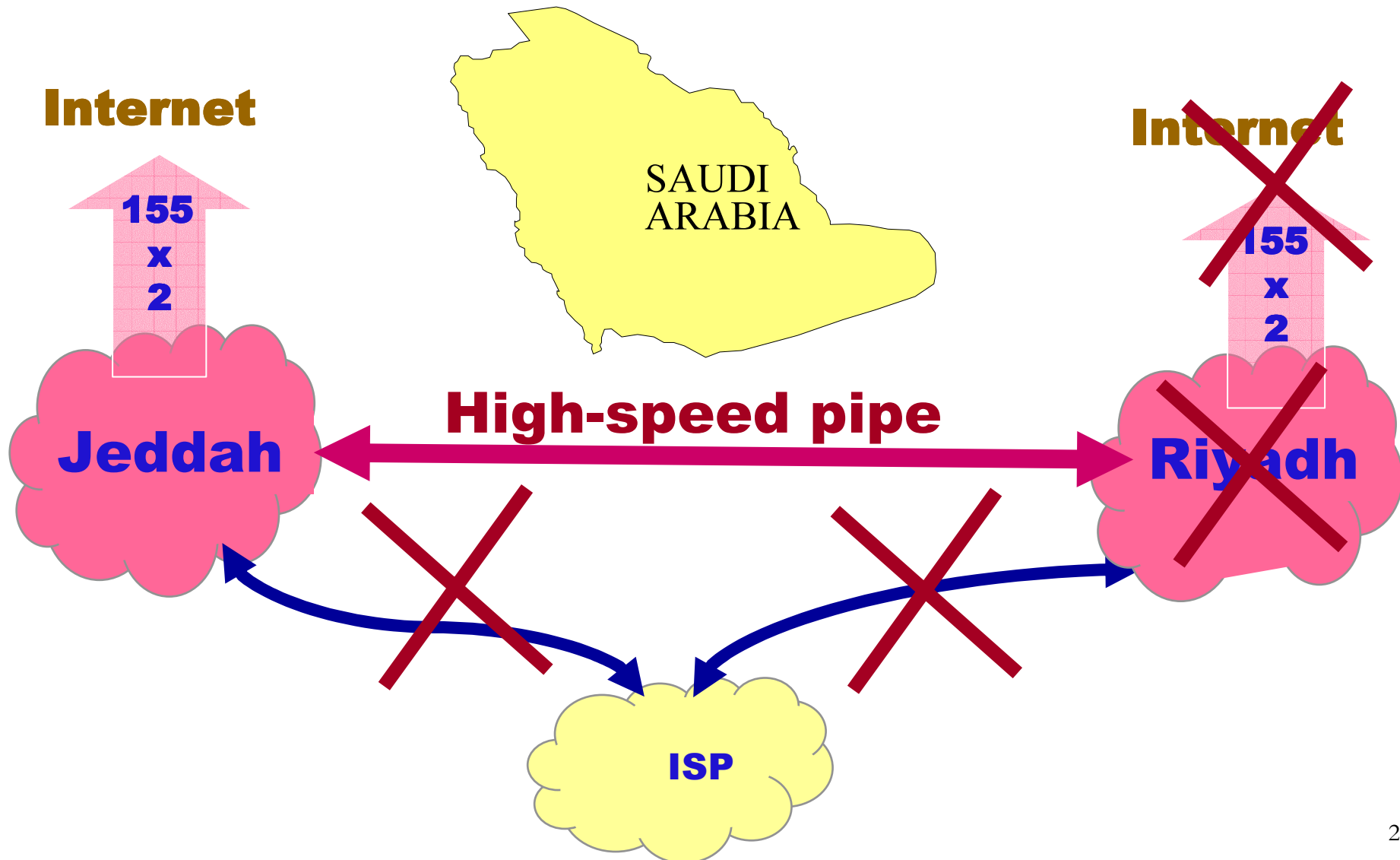
Domain name	Line utilization			ISP Name
	5 min	15 min	24 h	
ISP 1.net.sa	100%	100%	88%	Name of ISP 1
ISP 2.net.sa	87%	89%	72%	Name of ISP 2
ISP 3.net.sa	90%	90%	87%	Name of ISP 3
...	82%	86%	70%	...
	89%	86%	66%	
	100%	99%	79%	
	90%	88%	77%	
	100%	100%	87%	
	95%	96%	83%	
	44%	37%	51%	
	98%	99%	84%	
	100%	99%	88%	
	93%	91%	72%	

Red	> 95
Yellow	85-95
Green	< 85



Future Plan

Increasing the Reliability - Jeddah Site



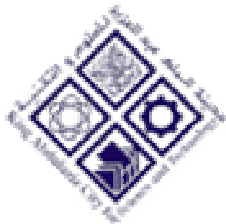


Conclusion

- **The Internet in Saudi Arabia is constantly being developed**
- **The number of users is rapidly increasing**
- **With STC's help, a solid information infrastructure is being developed upon which future information services will operate.**

Thank you!

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