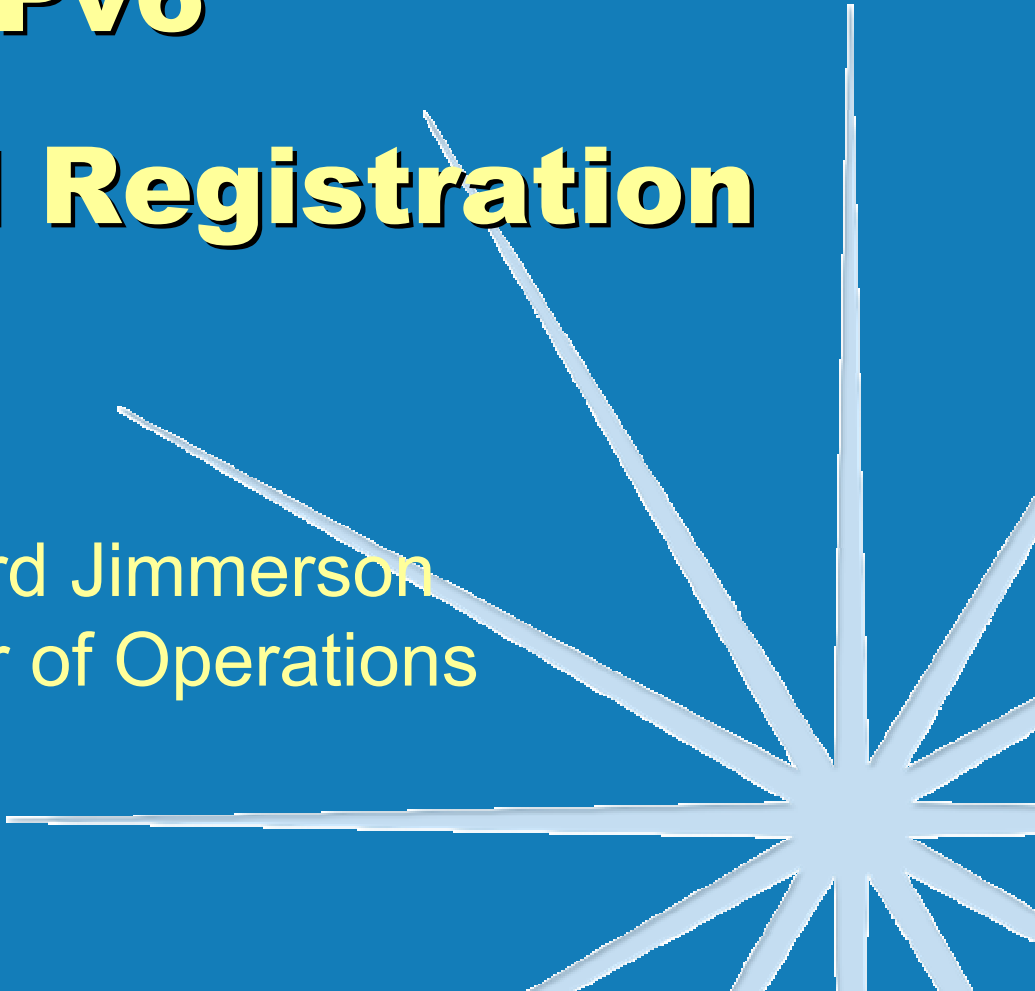


IPv6

Policy and Registration

Richard Jimmerson
Director of Operations



Overview

- * **IPv6 Policy**
 - ▶ History
 - ▶ Current IPv6 policies
 - ▶ Proposed changes
- * **IPv6 Request Procedures**
- * **Registration Fees**
- * **IPv6 Statistics**

IPv6 Policy History

- * Apr 1999 – IPv6 Allocations Begin**

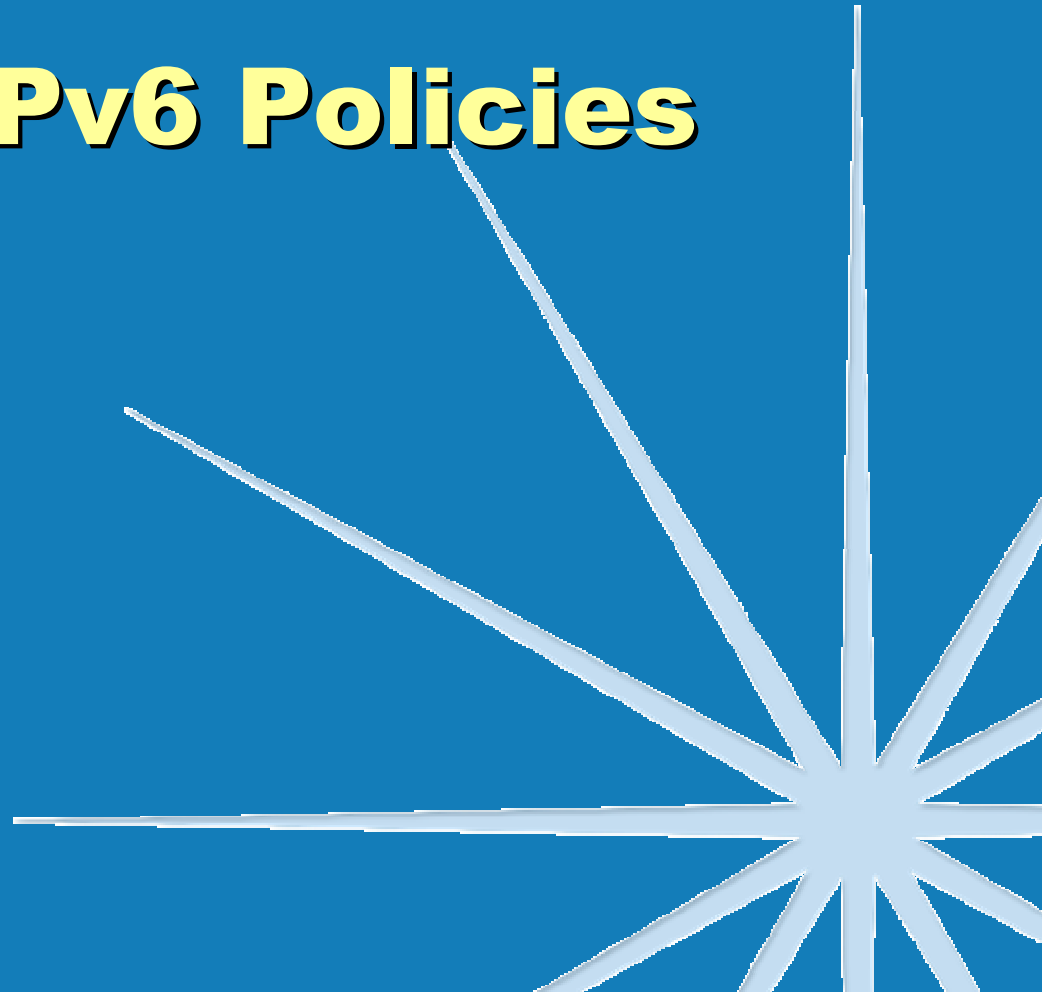
 - ▶ Provisional IPv6 Policies Used
 - ▶ Joint RIR consensus
- * Oct 1999 – Policy Review Begins**

 - ▶ Micro-allocations
 - ▶ Size of reassignments
- * Jun 2001 – Global Consensus**

 - ▶ Policy and Technical Boundaries
 - ▶ End Site Assignments [RFC 3177]
- * May 2002 – Global Consensus**

 - ▶ Initial Allocation Size to LIR
 - ▶ Initial Allocation Criteria

Current IPv6 Policies



Initial Allocation

* Size

- ▶ Minimum: /32
- ▶ Maximum: None

* Criteria

- ▶ Be an LIR (ISP)
- ▶ Not an End Site
- ▶ Plan to Provide
 - ▶ IPv6 Connectivity
 - ▶ /48 Assignments
200 in 2 years

Subsequent Allocation

* Criteria

- ▶ Assignments Registered
- ▶ Utilization Threshold (HD Ratio)

* Size

- ▶ Minimum: /32
- ▶ Maximum: None

Assignments by ISP (LIR)

*LIR to End Site

- ▶ /48 is the usual assignment size
- ▶ /64 only one subnet
- ▶ /128 only one device connecting

RFC 3177 "IAB/IESG Recommendations on IPv6 Address Allocations to Sites"

ARIN Micro-Allocation Policy

ARIN will make micro-allocations to critical infrastructure providers of the Internet, including public exchange points, core DNS service providers (e.g. ICANN-sanctioned root, gTLD, and ccTLD operators) as well as the RIRs and IANA. These allocations will be no longer than a /24 using IPv4 or a /48 using IPv6. Multiple allocations may be granted in certain situations.

Proposed Policy Changes

Requesting IPv6 Address Space

[See ARIN Website](#)



IPv6 Registration Fees

- * \$2,500 (US) for /32 or longer
- * Fee Waivers

► NOTE 1: From the minutes of the [ARIN Board of Trustees Meeting, November 17, 2002](#):

"The ARIN Board of Trustees extends the waiver of fees for the allocation of IPv6 address space to current IPv4 subscribers from January 1, 2003 until either such time as December 31, 2003 or a new IPv6 fee schedule is published, whichever occurs first."

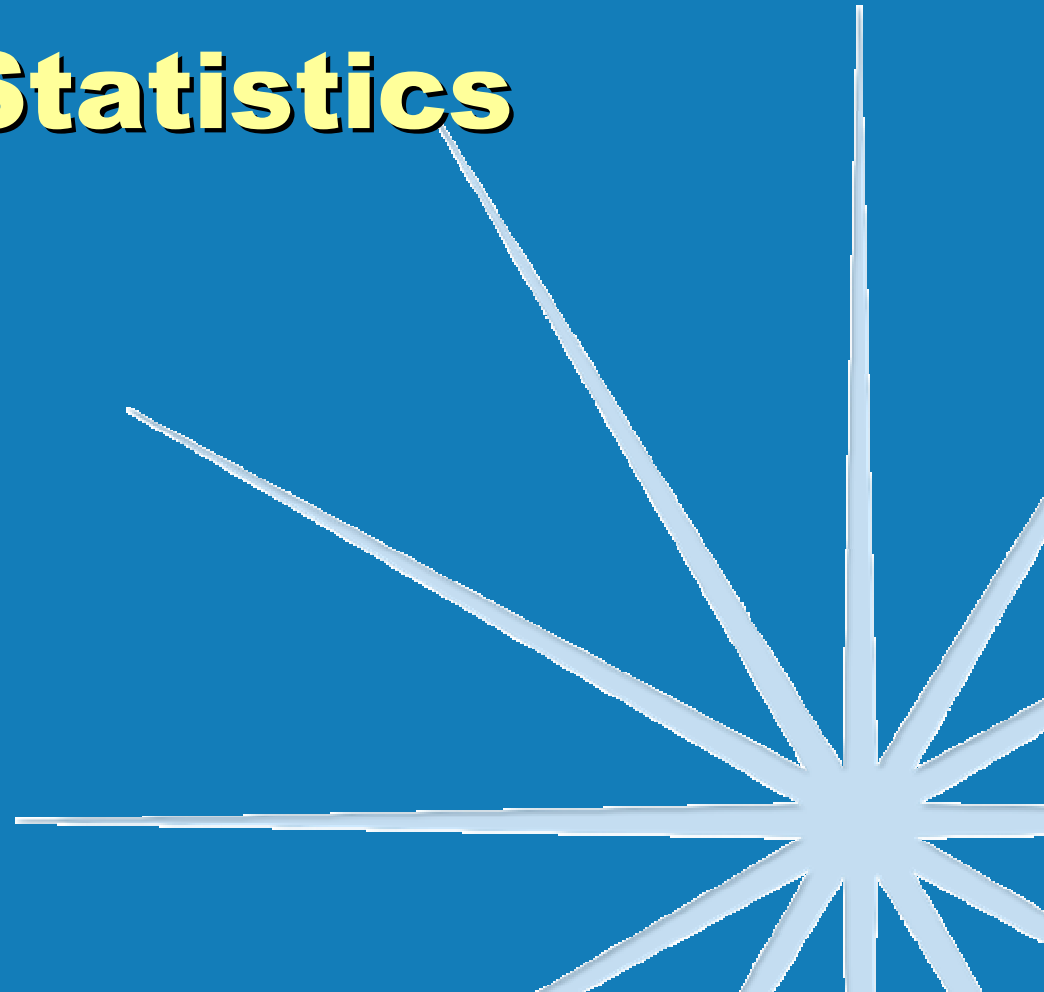
This is a continuation of the waiver that was first enacted at the Board of Trustees Meeting on [December 14, 2000](#).

► NOTE 2: From the minutes of the [ARIN Board of Trustees Meeting, November 17, 2002](#):

"The ARIN Board of Trustees extends the waiver of additional fees that would otherwise be assessed based on the larger initial amount of IPv6 address space from January 1, 2003 until either such time as December 31, 2003 or a new IPv6 fee schedule is published, whichever occurs first."

This is a continuation of the waiver that was first enacted at the Board of Trustees Meeting on [July 9, 2002](#).

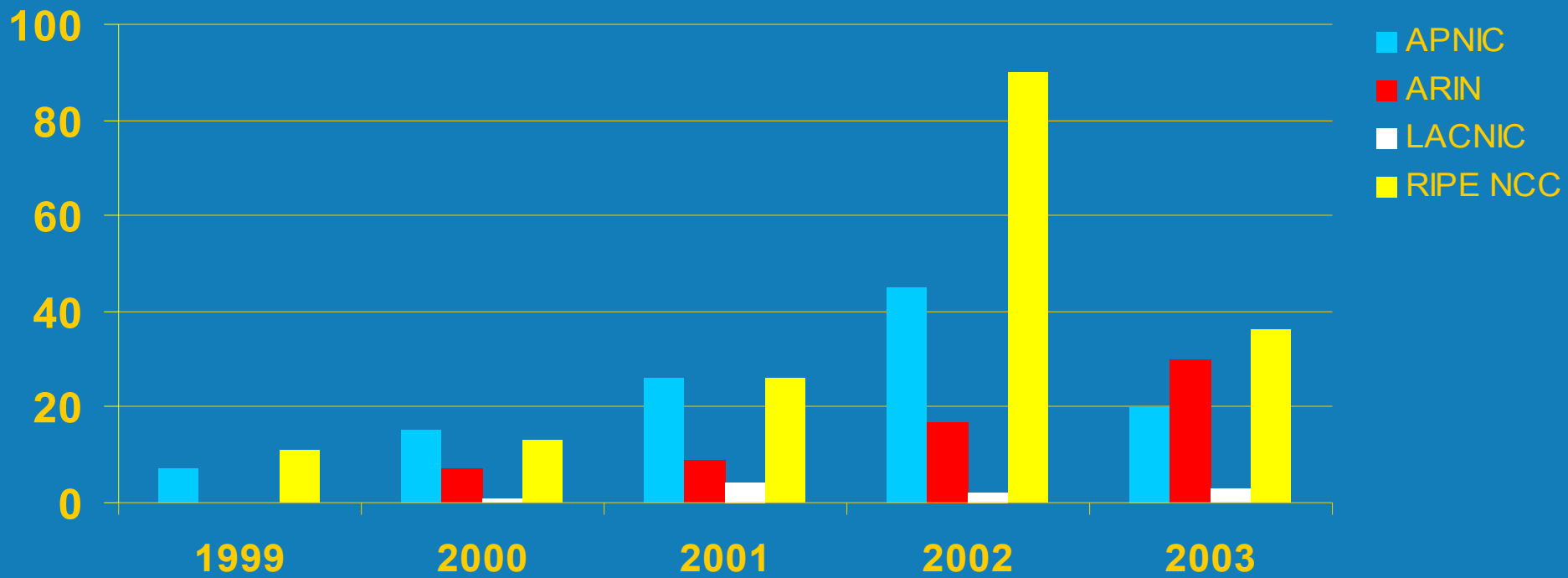
IPv6 Statistics



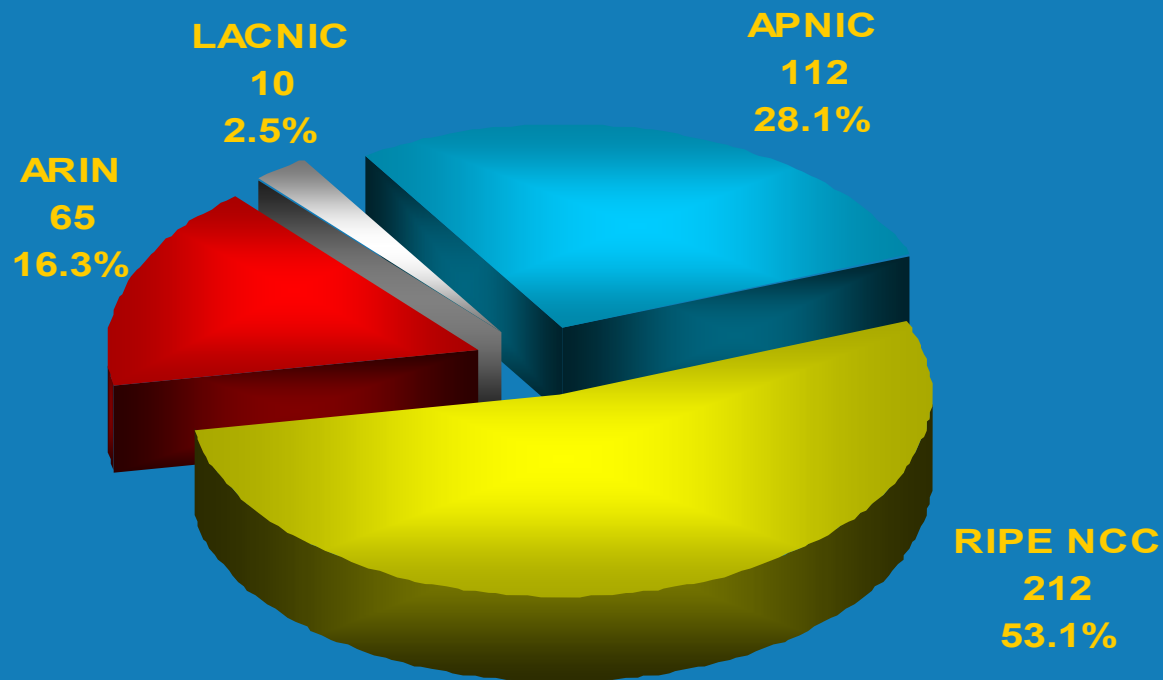
IPv6 Allocations from RIRs to LIRs/ISPs

Yearly Comparison

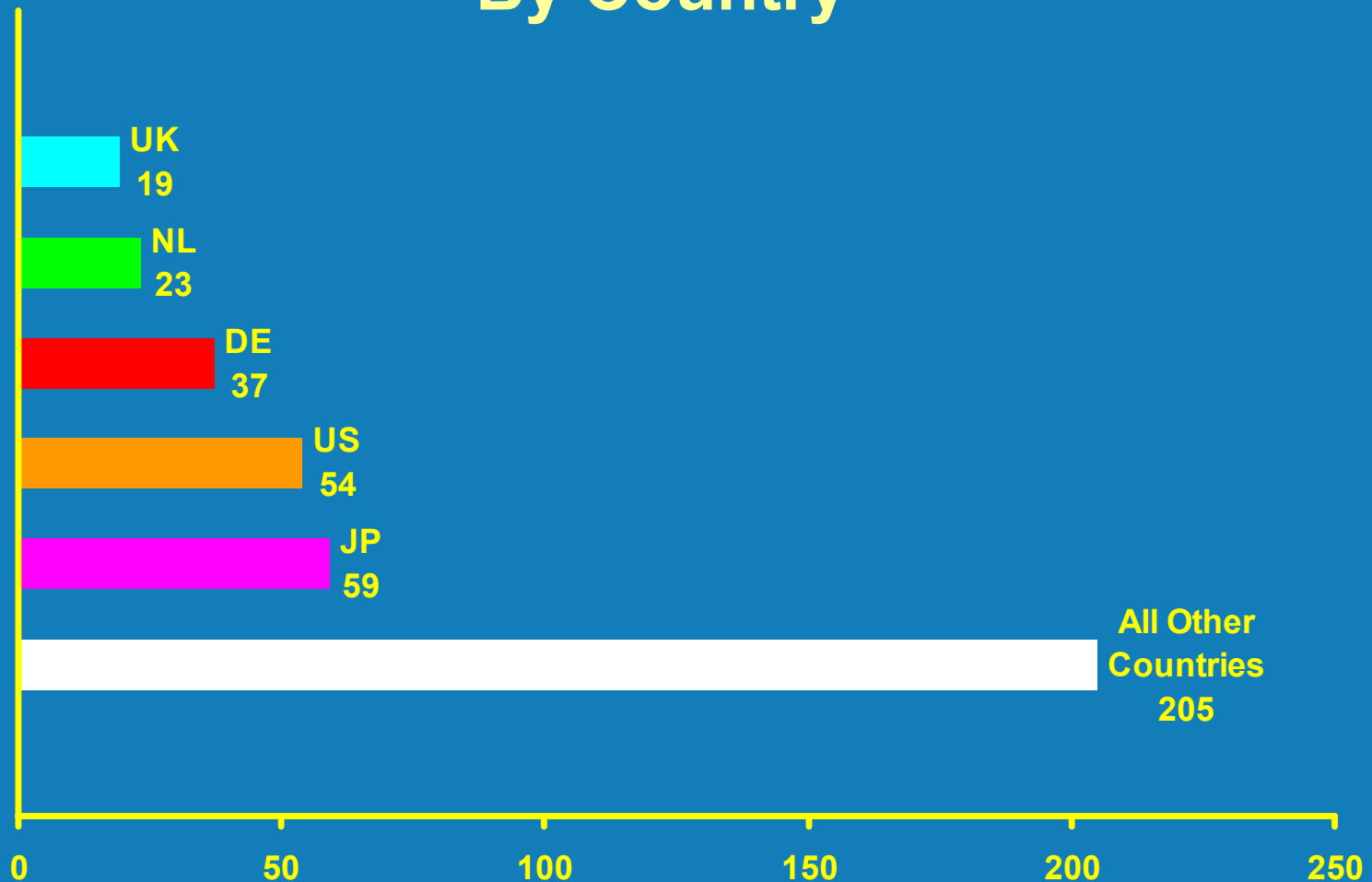
30 June 2003



IPv6 Allocations from RIRs to LIRs/ISPs Cumulative Total (1 January 1999 – 30 June 2003)



Total IPv6 Allocations from RIRs to LIRs/ISPs By Country



ARIN Region Specifics

As of October 14, 2003

87 direct IPv6 registrations:

/32 networks: 67

/35 networks: 6

/48 networks: 14

28 reassignments registered in ARIN DB:

/40 networks: 15

/48 networks: 12

/64 networks: 1

Breakdown by Country (/32s, /35s):

62 USA, 8 CA, 3 ZA

Thank You

