Large Space IPv4 Trial Usage Program for Future IPv6 Deployment
ACTIVITIES UPDATE

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TOPIC

- What is "Large Space IPv4 Trial Usage Program for Future IPv6 Deployment"?
  - In Past
    - Recalling: Objectives, address space, basic scheme
  - Things have been done since the last meeting.
    - Registry Operation
    - New conditions in Contract
    - Address Leasing Guideline
    - Address Handling and Reporting Scheme
    - Program Timetable
  - The current
    - Started allocation

What is ?

What is "Large Space IPv4 Trial Usage Program For Future IPv6 Deployment"?

In Past

- "Time-Limited" IPv4 Address Allocation Policy
  - Presented by Dr. Esaki of WIDE Project at the last 11th APNIC Open Policy Meeting
    - Explained Basic Leasing Policy
  - Received no objection at the last AMM (APNIC Member Meeting)

In Past (cont.)

Objectives

- Revitalizing the historically allocated address space

- Providing the challenge field for coming IPv6

  - Boosting up development of the "end-to-end" application

  - Exploring new services and business

  - Transferring trial to IPv6 infrastructure with the practical application and service

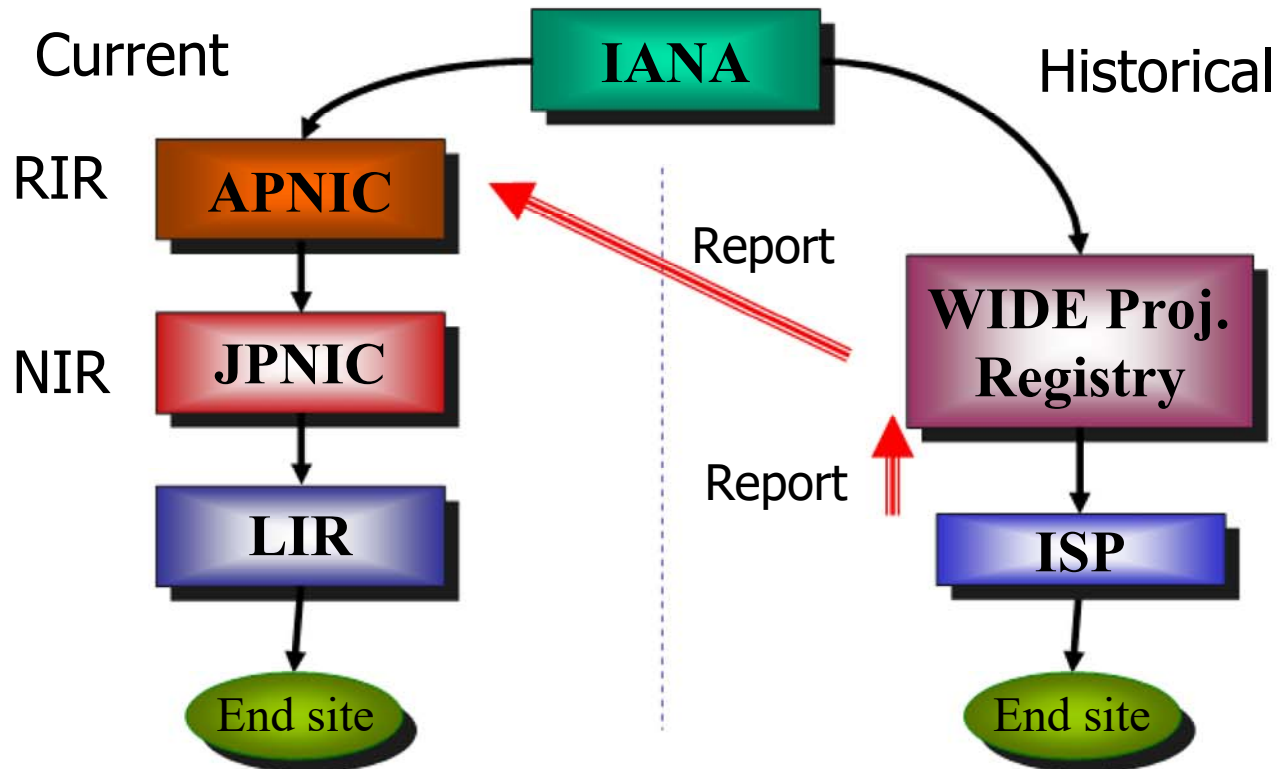 - Forming IPv6 address administration scheme in JP

In Past (cont.)

- **Address Space Handling**
  - The space historically allocated from IANA is utilized for this program.
    - The target address space: NET43 allocated to WIDE Project at present
  - The organization handling the historically allocated address space does the registry operating work to LIR in somehow.
  - Allocation to LIR is restricted in time of use by the contract
  - All address must be returned by the end of 2005 (transfer to IPv6)
    - The returned address will be returned to free block

6

In Past (cont.)

- **Basic Address handling scheme**

Current

RIR

NIR

IANA

Historical

APNIC

Report

WIDE Proj. Registry

JPNIC

LIR

Report

ISP

End site

End site

In Past (cont.)

- At the last meeting,
  - Received No Objection about the proposal at the meeting
  - Promised to report the activities update not only to APNIC but to public
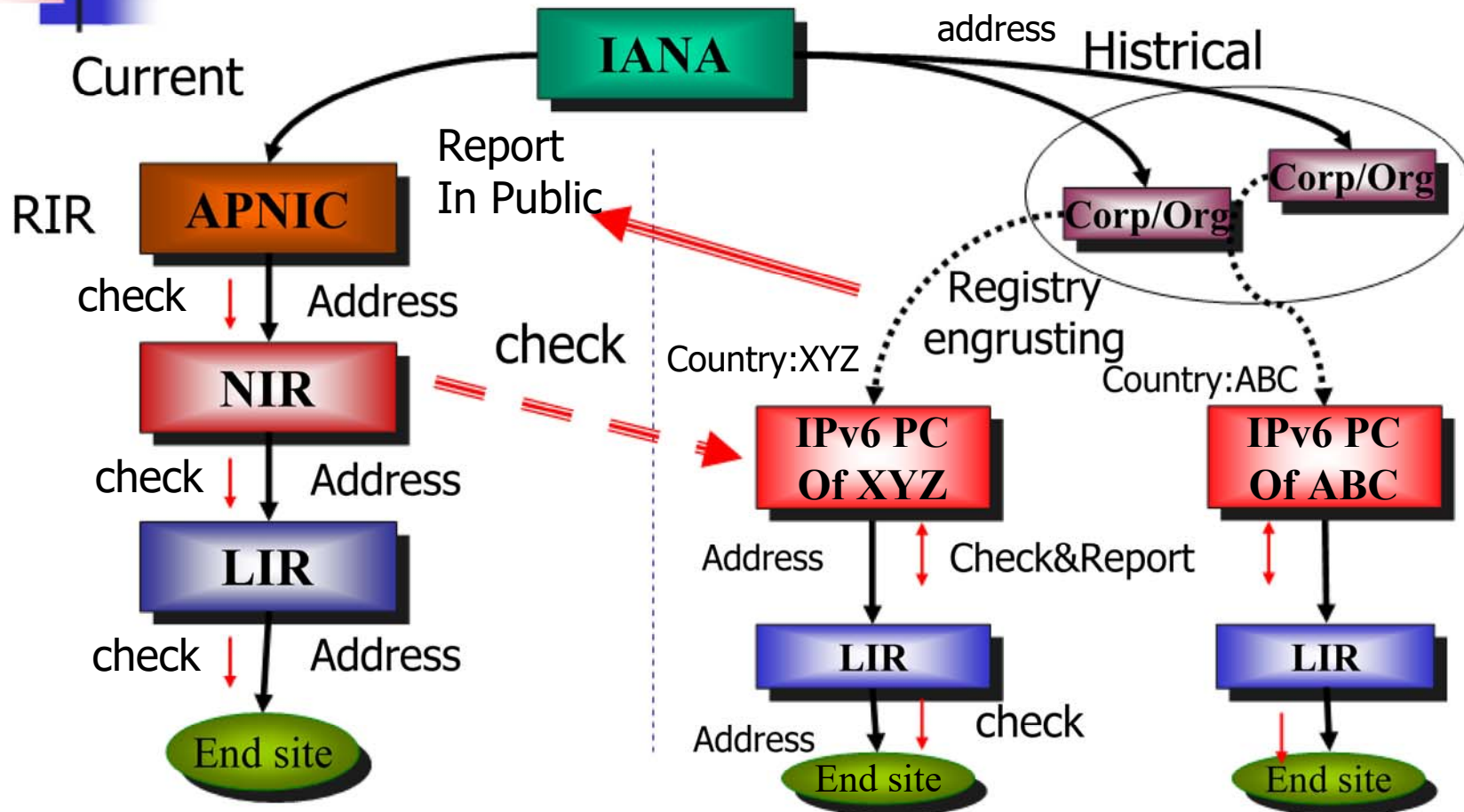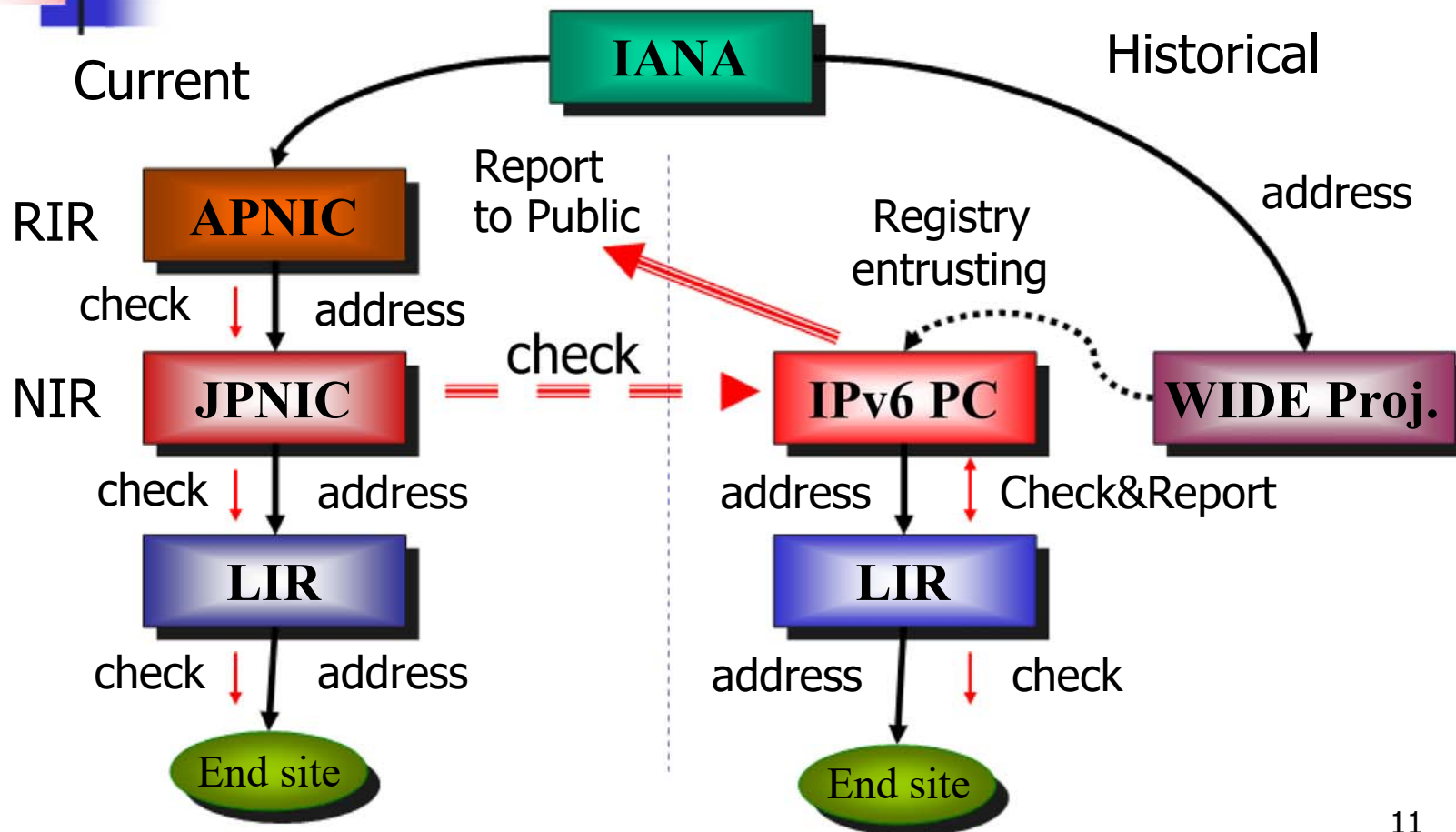
Go on to the next step

So, we proceed to set up the program.

- Things have been done since the last meeting.
    1. Image the project scheme in General
    2. Define the project scheme in Japan
        - Set the organization entrusted the registry work by WIDE Project
        - Create the address leasing contract
        - Detail the address leasing guideline
    3. Start the test allocation

Project scheme in general

Scheme in Japan:
Address Handling and Reporting Scheme

IANA

Current

Historical

RIR — **APNIC**

Report to Public

Registry entrusting

address

check ↓ address

check

NIR — **JPNIC**

IPv6 PC

WIDE Proj.

check ↓ address

address ↓ Check&Report

LIR

LIR

check ↓ address

address ↓ check

End site

End site

Trial Usage IPv4 Address space handling:

- The space historically allocated from IANA is utilized for this program.
- The organization handling the historically allocated address space entrusts the registry work to LIR with "IPv6 Promotion Council of Japan".
- Allocation to LIR is restricted in time of use by the contract
- All address must be returned by the end of 2005 (transfer to IPv6)
    - The returned address will be returned to free block
- NIR supervise the registry work of IPv6 PC of Japan

Registry Operation

Registry Work
(entrusted to **IPv6 Promotion Council of Japan**)

- Contract conclusion
- Allocation of address for the need of next 6 months
- Status check of address usage in every three month
- Status check of address assignment after one year past, and then the registry have a right to publicize it and/or a right to get the assigned address back if unused.
- Close relation with JPNIC as well as WIDE Project
- Report to APNIC and at other open opportunities

New Conditions in Contract

- Introduction of "Time-Limited Lease"
  - Contract conclusion is required prior to apply the trial address space leasing.
    - Agree to **become a member of IPv6 Promotion Council of Japan**
    - Conclude the address lease program contract
      - Yearly leasing (automatic extension)
      - **Return** by Dec. 2005
      - * After returning to the original organization, address will be returned to free block
    - Agree to **transfer** the user's services **to IPv6**
    - Agree to **report** the actual utilization of address in **every three months**

Address Leasing Guideline

Allocation Criteria

a. Be IPv4 address for this program remaining

b. Be a member of IPv6 Promotion Council of Japan

c. Have concluded the program contract (must be a legal entity)

d. Be the experimental usage with the written plan

- For IPv6 transition
- Plan must show using up /16 space within 6 months from the initial allocation.

e. Have peering connections with four or more providers (or planned to be so within 3 months)

Address Leasing Guideline (cont.)

Cont:

f. Have ability to execute office procedure and technical operation for assignment of addresses

- Details are clipped.

- Subsequent Allocation is **80% rule**.
- **No subleasing** is permitted.
- Order to **return** unassigned addresses if usage is **not satisfy with the condition in RFC2050** after 6 month and a year
- **Erase the Name Server Reverse Lookup Configuration** at the registry and compensate the applicants if violated

Address Leasing Guideline (cont.)

- In the same manner, assignment criteria has been set. (details are clipped)
- **This policy will comply with the existing address policy** which keeps conservation of address and aggregation of routing information.
  - RFC2050, RFC1519(CIDR), RFC2008

Program timetable

- First phase :
  - July 1, 2001 - December 31, 2001
  - With the part of 43/8
- Second phase :
  - January 1, 2002 -December 31, 2002
  - Examination of extending the program to another IPv4 address space
- The allocated IPv4 address space must return before December 31, 2005.

Just started!

- **Started Allocation:**
  - To three pilot cases in July 2001, prior to official start on August
  - Now, receiving application