IANA Update

CENTR GA 28, Amsterdam, Netherlands

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IANA Status

- 7 IANA Staff

  - David Conrad - General Manager
  - Barbara Roseman - Operations Manager
  - Kim Davies - Names Liaison
  - Naela Sarras - Project Specialist (Names)
  - Pearl Liang - Project Analyst (Names)
  - Michelle Cotton - Project Specialist (Numbers)
  - Sarah Trehern - Project Analyst (Numbers)

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IANA Primer

IANA has 2 primary roles, with multiple facets:

- **Names**
    - Root zone management
    - .int, .arpa, service zones

- **Numbers**
    - IP address allocation (IPv4, IPv6)
    - Private Enterprise Numbers
    - Port Numbering
   - Protocol Numbering (IETF Internet drafts)

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How much work goes through IANA?

The following statistics can be found at
http://www.iana.org/reporting-and-stats/ietf-performance.html

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Internet Drafts - Volume of Requests

Internet Drafts Queue 2004-5

	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
new tickets	11	12	10	14	16	20	18	17	9	25	25	19
completed tickets	9	1	18	22	8	15	17	36	16	27	14	21
queue size at close of month	27	38	30	22	30	35	36	17	11	9	20	18

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Internet Drafts - Processing time trend

Internet Drafts Processing Time 2005

	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
Processing time in days	30	41	34	54	26	26	23	16	20	17

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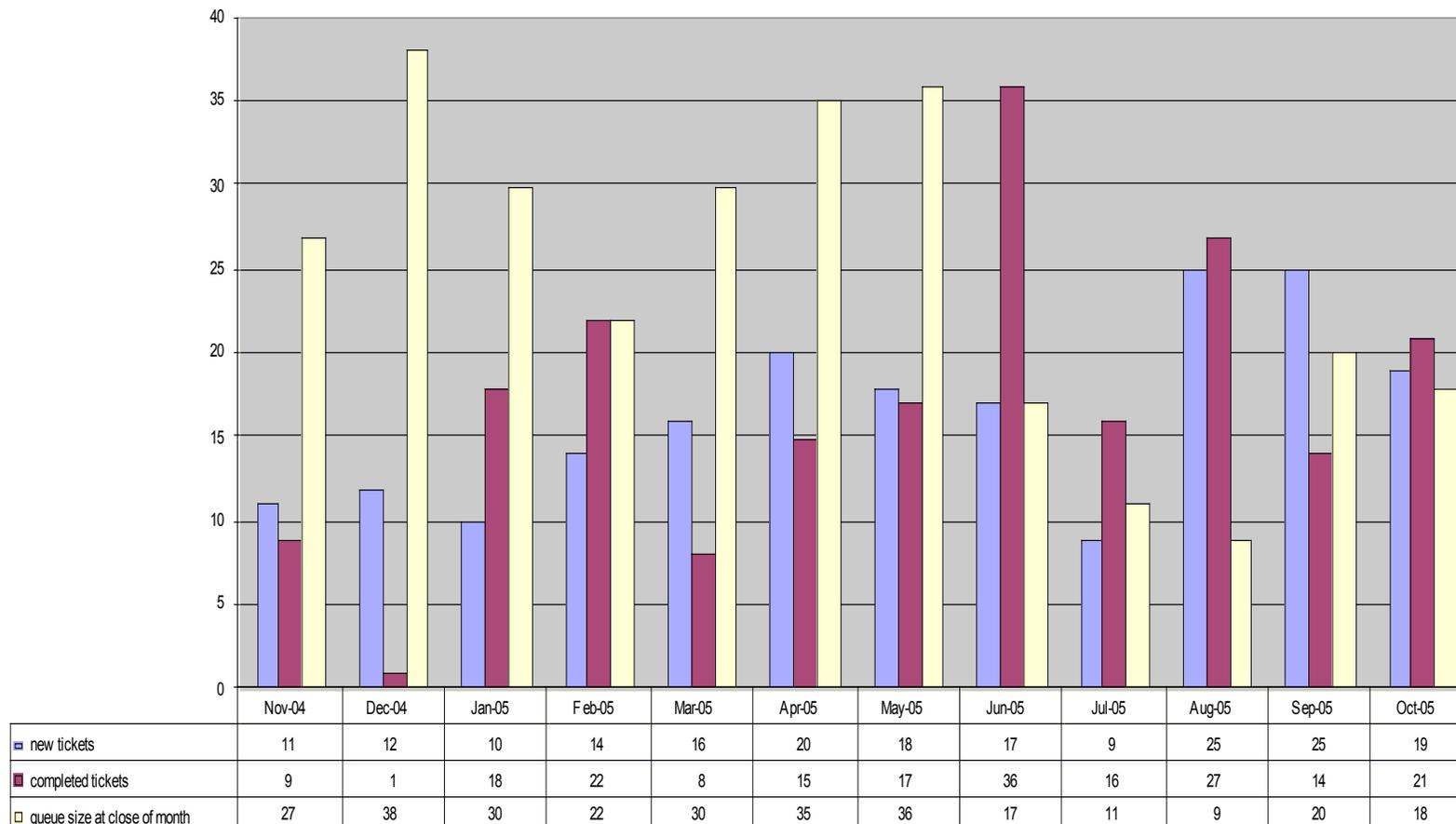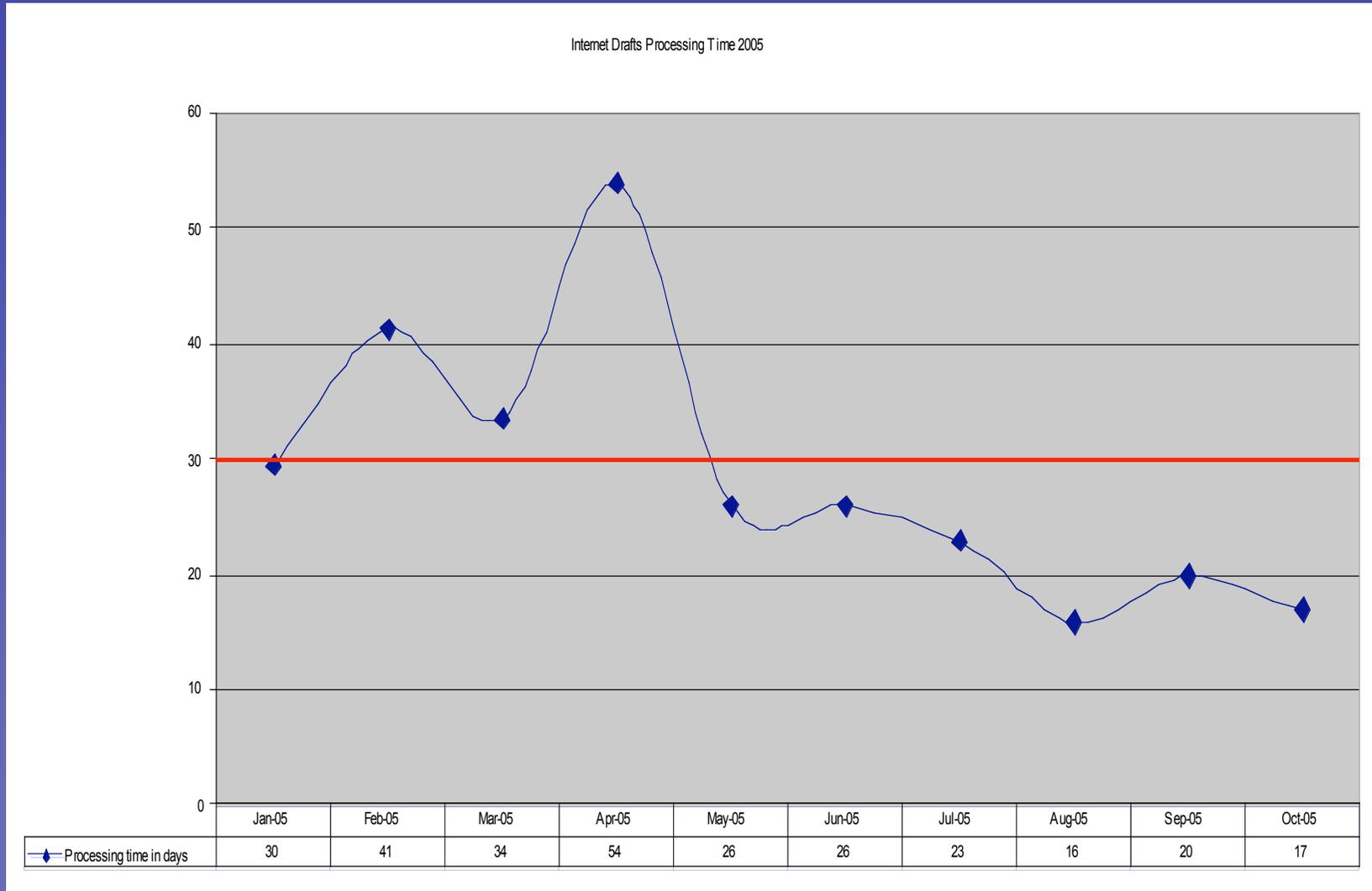
Miscellaneous Parameter Requests

≈100 other requests completed

Parameters assigned/registered through approved I-Ds:

DHCPv4 options 2
DHCPv6 options 2
GSSAPI Service Names   1
IKEv2 Identification Payload ID Types   1
IKEv2 Security Protocol Identifiers   2
IKEv2 Traffic Selector Types   1
IKEv2 Transform Type 3 (Integrity Algorithm), defined Transform IDs   2
KMPID Parameters - Parameter values   1
L2TP Parameters - AVPs 1
L2TP Parameters - Result Codes for the CDN Message   5
L2TPv3 Parameters - Pseudowire Types   2
LDP Parameters - FEC Type Name Spaces   2
LDP Parameters - Status Codes   8
LDP Parameters - TLV Types   3
MIME Media Types   3
NNTP Parameters - Capability Labels   3
RTSP Parameters - RTSP/1.0 Headers   1
RTSP Parameters - RTSP/1.0 Status Codes 1
SDP Parameters - Tokens - att-field (both session and media level)   2

SDP Parameters - Tokens - proto 1
SIP Parameters - Event Package 1
SIP Parameters - Header Fields 2
SIP Parameters - Option Tags   1
SIP Parameters - Resource-Priority Namespaces   5
SIP Parameters - Resource-Priority Priority-values   5
SIP Parameters - Response Codes 1
SSH Parameters - Encryption Algorithm Names   15
URN Namespace   2

New Registries set-up through approved I-Ds:

KMPID Parameters - Parameter values

Parameters assigned/registered requests made directly to IANA:

IANA ifType MIBs   1
IPv4 Multicast Addresses   8
MIME Media Types (application) 5
TRIP Parameters - ITAD Numbers 4

Parameter work involves a broad spectrum

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Port Requests

Port Requests 2005

	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
■ new port requests							29	11	31
■ requests processed	5	8	6	2	3	148	27	20	95
□ queue size							29	20	32

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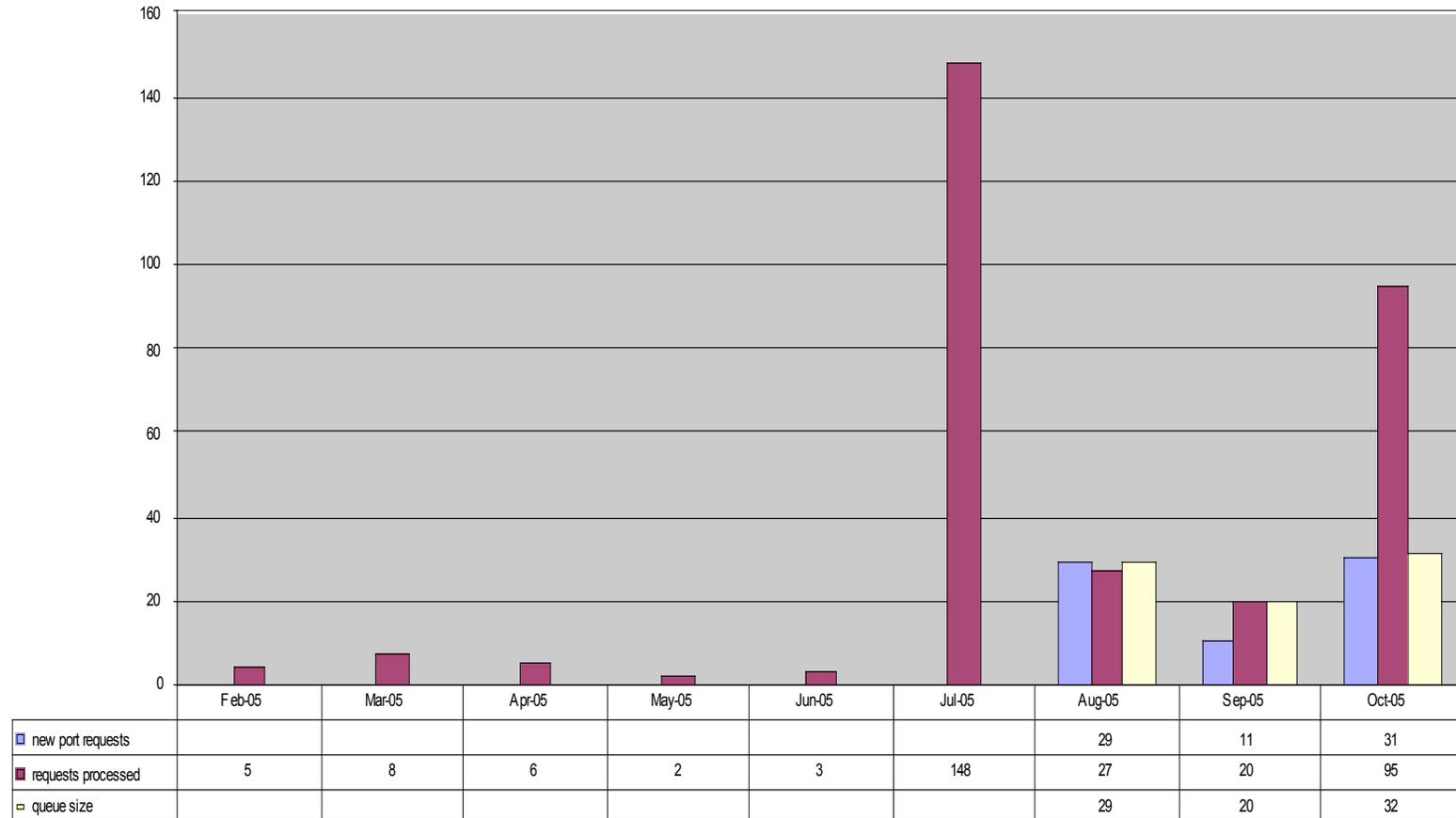
PEN Requests

PEN Statistics 2004-5

	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
new applications	341	261	268	278	291	316	313	287	189	301	279	265
assignments completed	408	126	117	338	137	102	139	467	209	97	148	408

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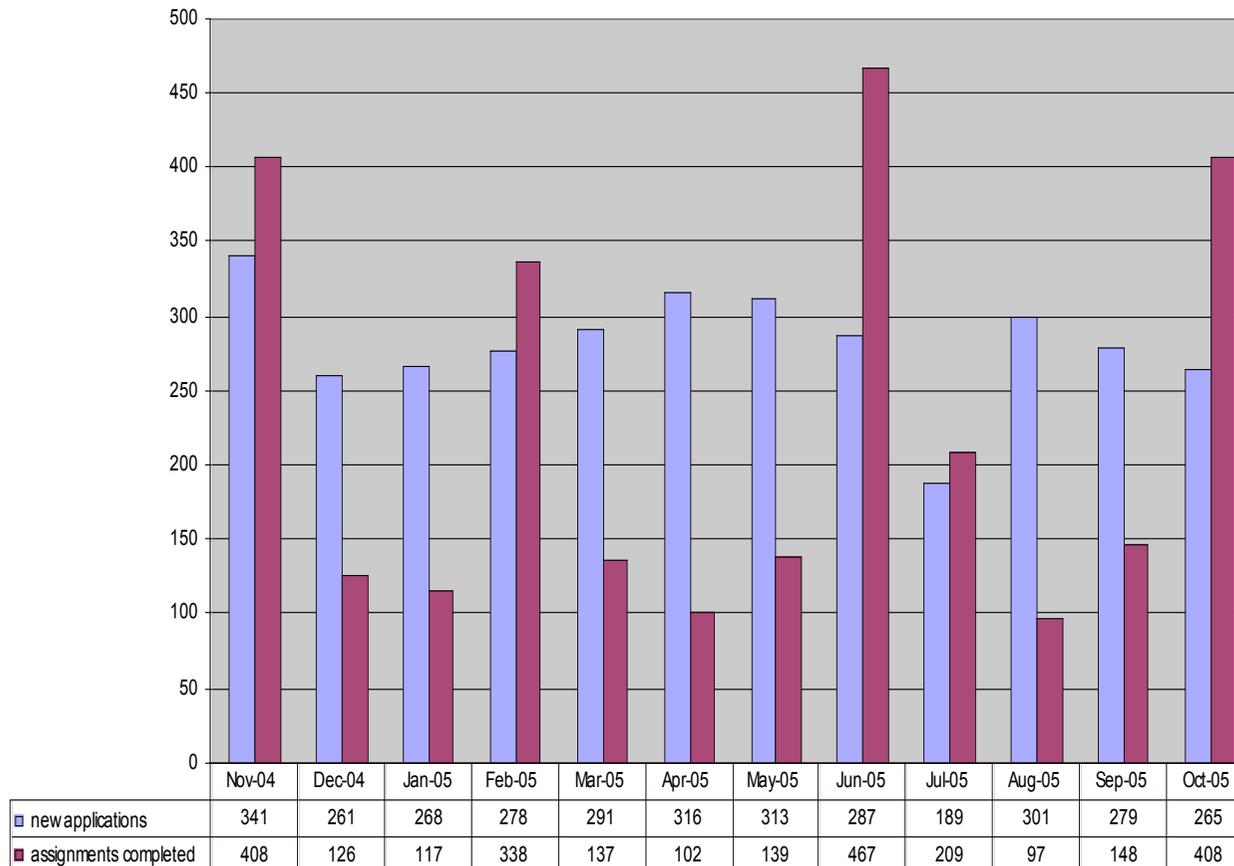
Root Management Specifics

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Root Management Queue - Volume of Requests

Root Management monthly queue 2005

	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
☐ new requests	16	15	24	31	19	34	17	27	23	14
☐ completed requests	13	9	21	10	22	32	33	55	26	28
☐ queue size	51	57	60	81	78	80	64	35	32	18

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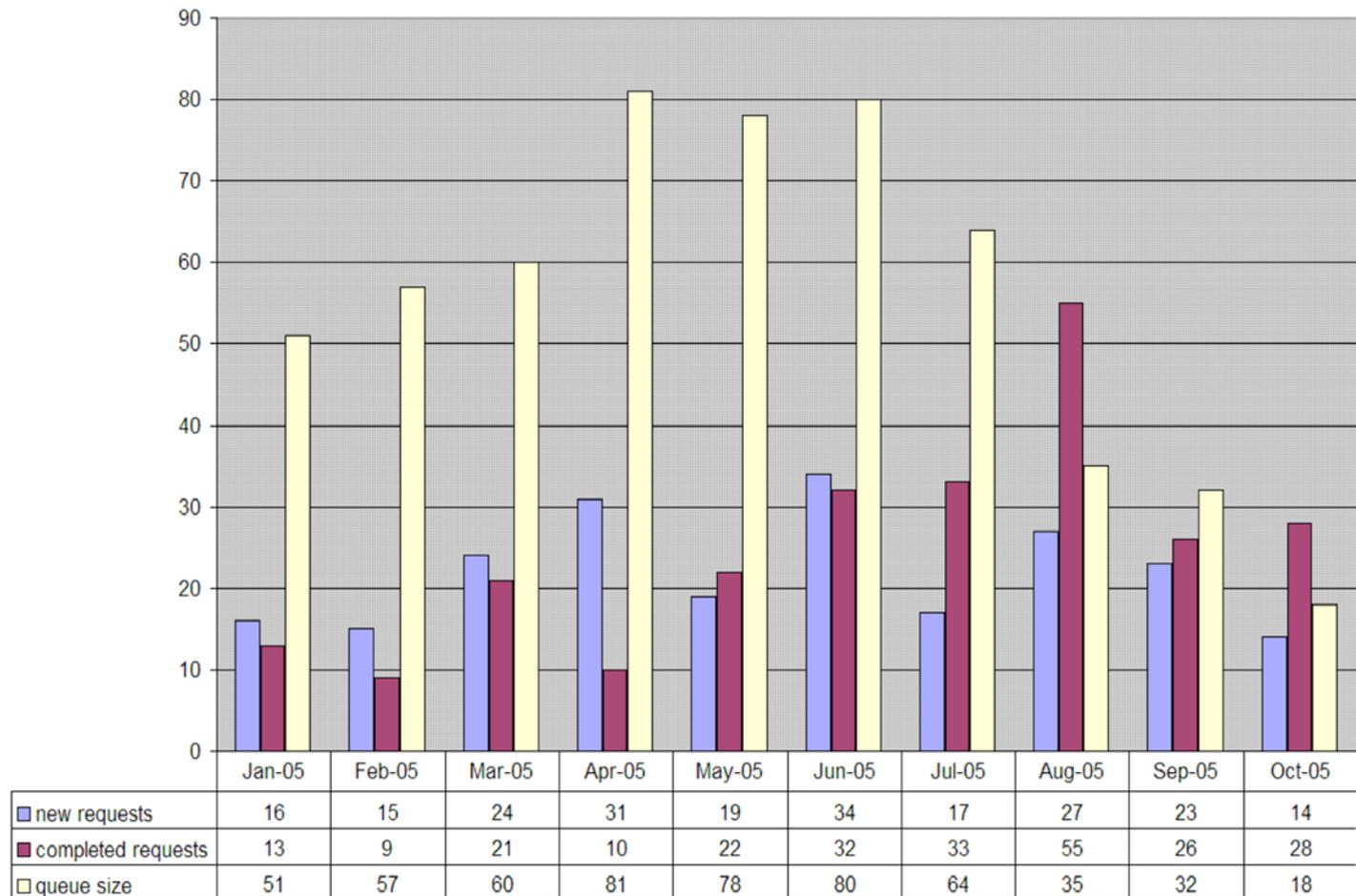
Root Management Queue - Processing Time Trend

Root management requests processing times 2005
(Open requests projected to 18 November)

This chart represents ticket duration from the month opened to their (projected) close.

	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
processing time in days (completed tickets)	65	103	78	70	45	38	20	16	22	8
processing time in days (projected)	65	105	77	72	49	43	21	19	18	18

November 22, 2005

IANA Update, CENTR GA 28

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Top Root Change Holdups

1. Lack of prompt confirmation of request
2. Name servers are dysfunctional
3. Special handling requirements specific to TLD not met
    1. Internal AC and TC email not used as originator
    2. Governmental/SO/other approval
4. Request impacts third parties (i.e. glue)

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Analysing the Root Management Queue

As at 6pm, Friday 18 November 2005

Number of requests in the queue   19

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Analysing the Root Management Queue

As at 6pm, Friday 18 November 2005

Number of requests in the queue   19

Breakdown:

Pending renumbering of communal glue   8

Waiting for special approval   2

Policy Question   1

Redelegations (i.e. change of manager)   2

Technical failure   1

No action - awaiting confirmation to close   2

New request - unprocessed   1

Misc   2

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Analysing the Root Management Queue

As at 6pm, Friday 18 November 2005

Number of requests in the queue   19

Breakdown:

Pending renumbering of communal glue	8	0
Waiting for special approval	2	0
Policy Question	1	1
Redelegations (i.e. change of manager)	2	1
Technical failure	1	0
No action - awaiting confirmation to close	2	0
New request - unprocessed	1	1
Misc	2	0

Total "held up" in IANA   3

- – 1× policy clarification
- – 1× redelegation report in progress
- – 1× new (30min old) request

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Observations

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My Personal Observations So Far

1. Hard-working, conscientious staff
2. Internal recognition of failures
3. More work than any one community imagines
4. Better statistics/explanations probably needed to expose true state of IANA and its efficiency
5. Failures are very public - disproportionate effect?
6. Lack of documentation of process - but it is in development.
7. Hard to build relationships, or show improvement, when interactions so few (e.g. 1 every n years)
8. Multiple systems need converging
9. Developing a strong CS ethic
10. Satan not yet found lurking in corridors

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High Priorities

- Queue completion
  - Some "stubborn" outstanding requests are due to lack of policy clarity to move forward
  - Documenting issues for policy review

- Improving systems
  - Improving technical tools
  - Working out where automation makes sense
  - Identifying best mechanism to automate

- Optimisation
  - Review and document existing practices
  - Identify improved techniques
  - Simplify multitude of systems

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Looking Forward

- For many years the IANA function has been understaffed - that's now changing.

- With better staffing IANA now in a position to address the full diversity of responsibilities
  - Will be opening new positions as needed and filling them with appropriately skilled individuals

- There is incredible resolve in focus within IANA, and also ICANN as a whole, to address community concerns on IANA function.

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Lastly:

- Contact me with any of your concerns, feedback or questions
- Email is kim.davies@icann.org, other methods pending.

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