RIPE NCC
RIPE NETWORK COORDINATION CENTRE

The Registry

Highlights 2024

Hans Petter Holen | RIPE 90 | 14 May 2025

The Registry

Registration Services

- Responsible for maintaining the RIPE Registry and allocating and assigning IP addresses and AS Numbers.

Member Services

- Personalised support to members, applicants and others who use our services. This includes responding to general queries, invoice questions, and processing membership applications, administrative and contractual changes.

Registry Monitoring

- Maintain the accuracy of the RIPE register by checking that the information provided complies with RIPE policies.

Budget Overview

The Registry

Technology

	Registration Services	Member Services	Registry Monitoring	LIR Portal	RPKI	RIPE Database
Total budget 9,600	**2,300**	**1,350**	**1,350**	**2,350**	**1,550**	**700**
5,000	↑	↑	↓	↑	↓	↓
Actual expenses 9,509	**2,306**	**1,473**	**1,284**	**2,367**	**1,445**	**634**
5,063						
-1.3%						

MEMBERSHIP OVERVIEW

All numbers are as of 31 December 2024. Please note that one member can hold more than one LIR.

19,993 (- 84)
Total number of active members

957 (- 10)
New LIRs

15,381 (+ 100)
Members with an IPv6 allocation

20,991 (- 579)
Total number of active LIRs

120 (+ 1)
Member countries

TOP 10
Members by country

DE	2,233
GB	1,977
RU	1,418
FR	1,238
IT	1,137
NL	1,127
ES	901
CH	720
PL	664
TR	591

TOP 10
New members by country

DE	85
GB	78
IR	69
TR	61
FR	48
IT	43
RU	43
NL	42
ES	30
CH	27

TOP 10
LIRs by country

DE	2,323
GB	2,047
RU	1,474
FR	1,306
IT	1,190
NL	1,179
ES	942
CH	744
IR	700
PL	688

CLOSURES INITIATED BY

TOTAL 1,536

196 the RIPE NCC
1,340 members

REASONS FOR CLOSURE BY THE RIPE NCC

TOTAL 196

9 Untruthful information
29 Unresponsiveness
5 Bankruptcy
153 Non-payment

**952** new LIR applications cancelled

Internet Number Resources Overview

IPv4 /24 ALLOCATIONS BY COUNTRY

89	IR
61	LT
52	DE
50	GB
40	FR
36	RU
34	IT
30	TR
25	NL
315	Other

ALLOCATIONS AND ASSIGNMENTS

IPv6 1,116
- 0 — IPv6 anycast assignments
- 1 — IPv6 temporary assignment
- 22 — IPv6 assignments to IXPs
- 68 — IPv6 allocation extensions
- 261 — IPv6 PI assignments
- 764 — IPv6 allocations

IPv4 773
- 0 — Addresses allocated from IANA's Recovered IPv4 Pool
- 18 — IPv4 temporary assignments
- 23 — IPv4 assignments to IXPs
- 732 — /24 allocations

ASNs 2,205
- 0 — temporary 16-bit assignments
- 4 — temporary 32-bit assignments
- 25 — 16-bit assignments
- 2,176 — 32-bit assignments

/24 IPv4 ALLOCATIONS
- 2023: 751
- 2024: 732

IPv4 ADDRESSES ALLOCATED
- 2023: 192,256
- 2024: 187,392
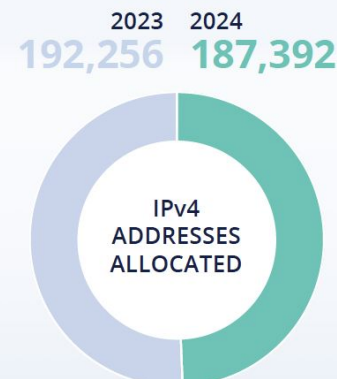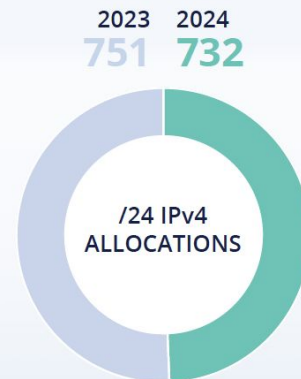
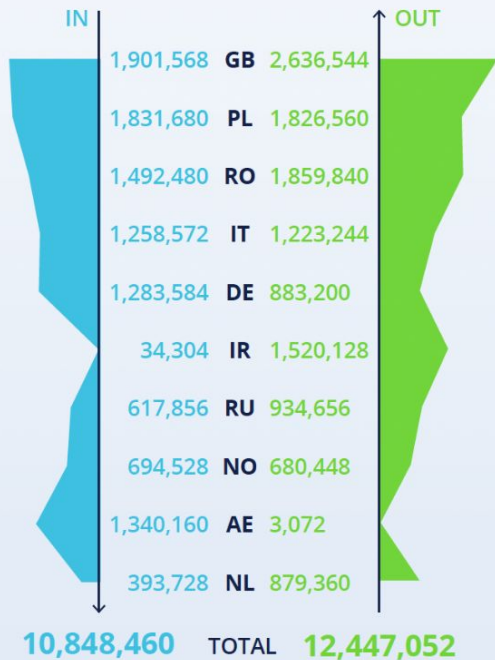**RIPE Labs** — IPv6 Stockpiling: A Trojan Horse in Our Midst? Read more

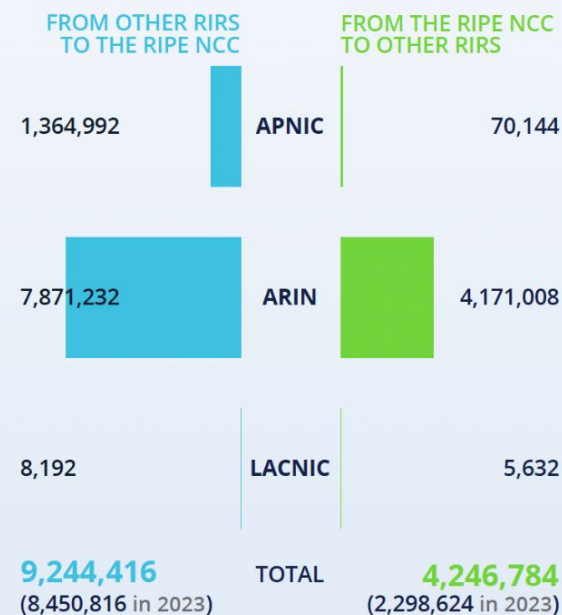**RIPE Labs** — Schrödinger's IPv6 Cat Read more

Transfers Overview

INTRA-RIR TRANSFERS BY COUNTRY - TOP 10
(IPv4 addresses)

IN		OUT
1,901,568	**GB**	2,636,544
1,831,680	**PL**	1,826,560
1,492,480	**RO**	1,859,840
1,258,572	**IT**	1,223,244
1,283,584	**DE**	883,200
34,304	**IR**	1,520,128
617,856	**RU**	934,656
694,528	**NO**	680,448
1,340,160	**AE**	3,072
393,728	**NL**	879,360
10,848,460	TOTAL	**12,447,052**

TRANSFERS WITHIN THE RIPE NCC'S SERVICE REGION

IPv4

ADDRESSES
PI 845,388
PA 16,216,320

BLOCKS
PI 803
PA 5,401

TOTAL **17,061,708**
TOTAL **6,204**

IPv6

BLOCKS
PI 63 (/48)
PA 1,587 (/32)

TOTAL **1,650**
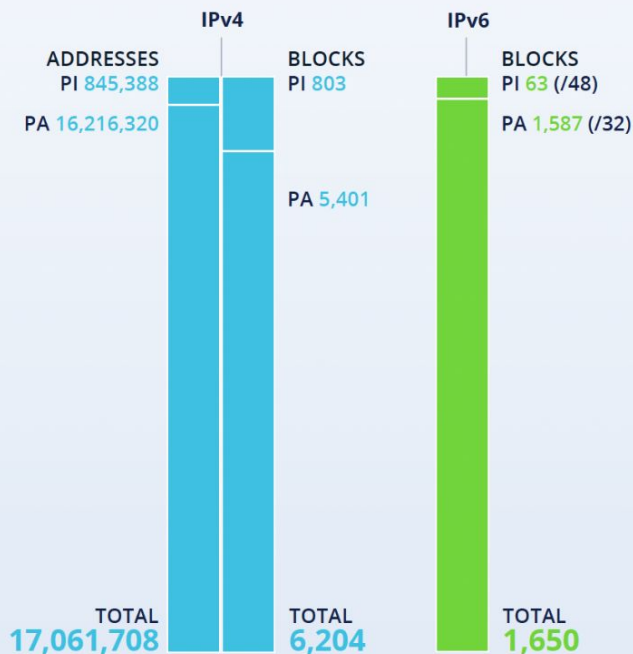
INTER-RIR TRANSFERS
(IPv4 addresses)

FROM OTHER RIRS TO THE RIPE NCC | | FROM THE RIPE NCC TO OTHER RIRS

FROM OTHER RIRS TO THE RIPE NCC		FROM THE RIPE NCC TO OTHER RIRS
1,364,992	**APNIC**	70,144
7,871,232	**ARIN**	4,171,008
8,192	**LACNIC**	5,632
9,244,416 (8,450,816 in 2023)	TOTAL	**4,246,784** (2,298,624 in 2023)

RIPE Registry Accountability

ARCs (Assisted Registry Checks) completed

2023	2024
2,297	2,445
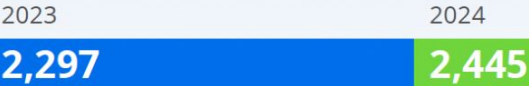
Abuse-c ROLE objects created and/or updated

2023	2024
149,228	102,939

Validated abuse-c email addresses

2023	2024
84,868	83,509
Validated using automated process 84,219	Validated using automated process 82,658
Required manual intervention 649	Required manual intervention 851

READ MORE

RIPE Registry Accountability
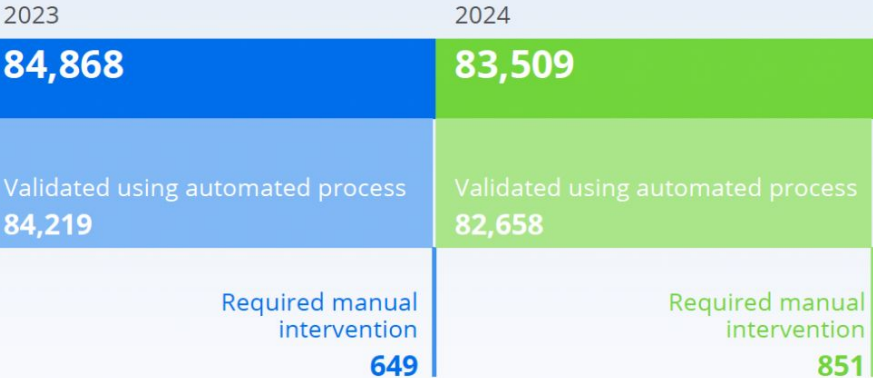
REPORTS RECEIVED VIA THE ABUSE FORM

TOTAL
380

ABUSE-C VALIDATION INVESTIGATIONS

TOTAL
2,366

841 LIR accounts

774 LIR resources

751 End Users

2FA ROLLOUT

On 27 March 2024, two-factor authentication (2FA) became compulsory for all RIPE NCC Access accounts. This allowed us to increase the security related to these accounts and to therefore diminish the risk of hijacks. This was also a direct response to a security breach that involved several RIPE NCC Access accounts being hijacked.

SECURITY INCIDENTS

Security incidents are detected on the basis of audits performed, alerts from our security monitoring tooling and external reports.

INFORMATION SECURITY INCIDENTS

IN 2024

0 Crisis (Priority 1)

1 Major Incident (Priority 2)

5 Unexpected Incidents (Priority 3)

0 Incident (Priority 4)

INFORMATION SECURITY REPORTS

We encourage the reporting of vulnerabilities in line with our Responsible Disclosure Policy.

IN 2024

79 Reports were relevant

239 Security-related reports received

READ MORE

HIJACK INVESTIGATIONS

IN 2024

214 Hijack investigations

16 Reports to the police

6 Due diligence warnings (official warnings)

5 Disputed transfers

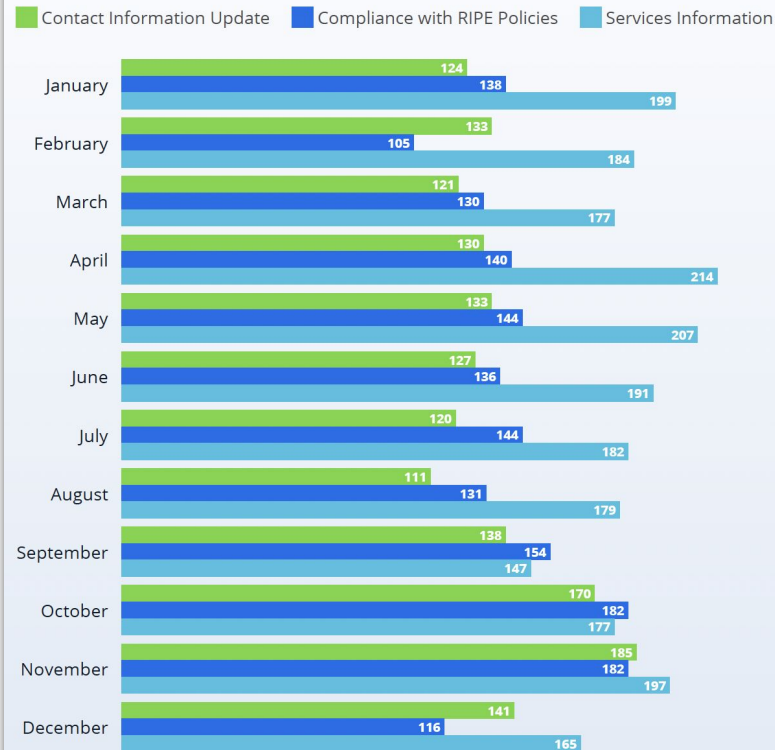**9** New membership applications blocked*

2 SSA terminations*

*Provision of untruthful information.

Assisted Registry Checks (ARCs)

- 2,445 ARCs completed
- 5,500 Corrective actions updating
  - contact information (e.g. legal address, email),
  - ensuring compliance with RIPE Policies (e.g., Abuse-c policy, proper registration of address blocks)
  - clarifying services information related
- to RIPE NCC offerings like
  - RIPEstat, RIPE Atlas and the RIPE NCC Academy
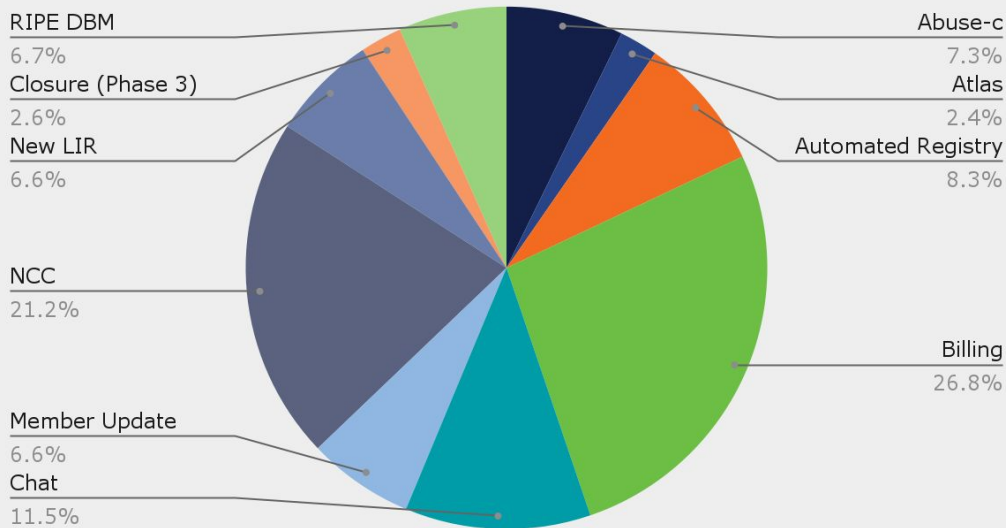

ARC Outcomes 2024

Legend: Contact Information Update | Compliance with RIPE Policies | Services Information

Month	Contact Information Update	Compliance with RIPE Policies	Services Information
January	124	138	199
February	133	105	184
March	121	130	177
April	130	140	214
May	133	144	207
June	127	136	191
July	120	144	182
August	111	131	179
September	138	154	147
October	170	182	177
November	185	182	197
December	141	116	165

Member Services Workload

Takeaways:

- Total number of tickets for 2024 was 32,514

- 19.4% increase compared to 2023 (27,231)

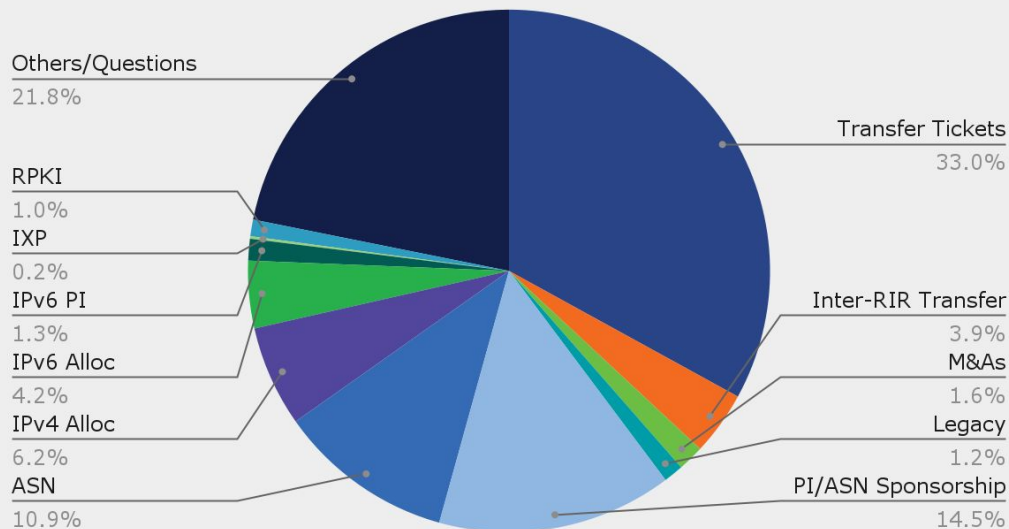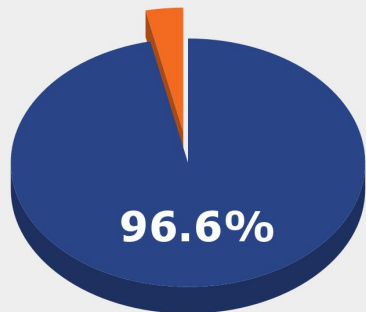- Main drivers was 2FA implementation

Member Services 2024

RIPE DBM
6.7%

Closure (Phase 3)
2.6%

New LIR
6.6%

NCC
21.2%

Member Update
6.6%

Chat
11.5%

Abuse-c
7.3%

Atlas
2.4%

Automated Registry
8.3%

Billing
26.8%

Registration Services Workload

Takeaways:

- Workload increased significantly in 2024 due to new charging scheme and sponsorship changes for independent resources

- To improve efficiency we are continuously evaluating enhanced automation, currently the sponsorship change request process is being worked on
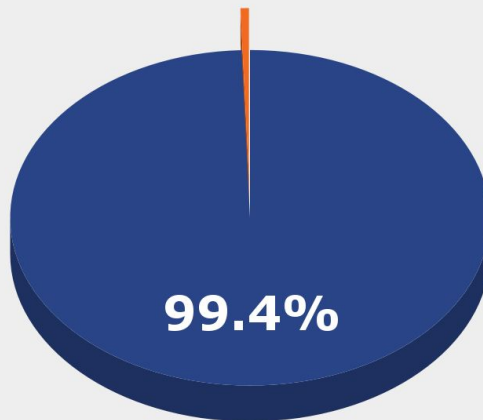
Registration Services 2024

Category	Percentage
Transfer Tickets	33.0%
Inter-RIR Transfer	3.9%
M&As	1.6%
Legacy	1.2%
PI/ASN Sponsorship	14.5%
ASN	10.9%
IPv4 Alloc	6.2%
IPv6 Alloc	4.2%
IPv6 PI	1.3%
IXP	0.2%
RPKI	1.0%
Others/Questions	21.8%

Accuracy

96.6%

● Matched ● Not Matched

3.4% = 687 members not matched
196 are organisations

99.4%

● Matched ● Not Matched

Organisational members

96.8%
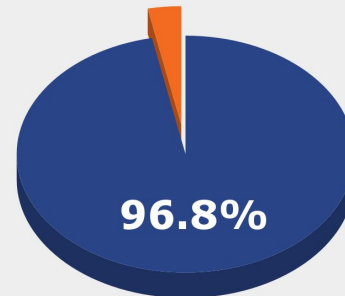
● Unique Email Addresses ● Bounces

 Matched with business registry

Third party provider with worldwide coverage.

Automatic links to national business registers

Email addresses bounces

We have actively verified Abuse-c emails over the last few years.

We also need to verify:

- Billing
- Organisation
- Registry Contacts

Accuracy
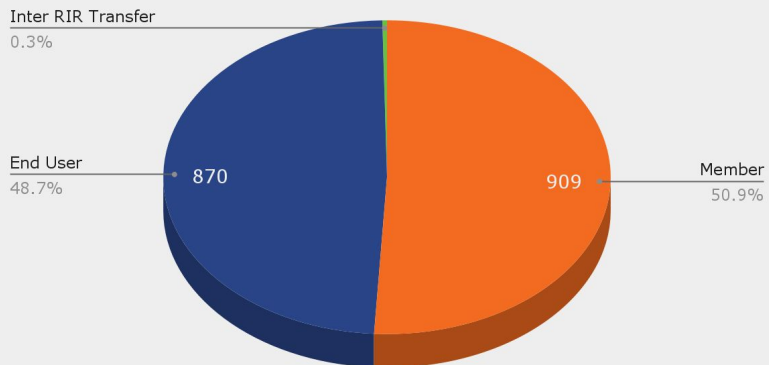
Monitoring of Registry Accuracy Alerts

Implemented
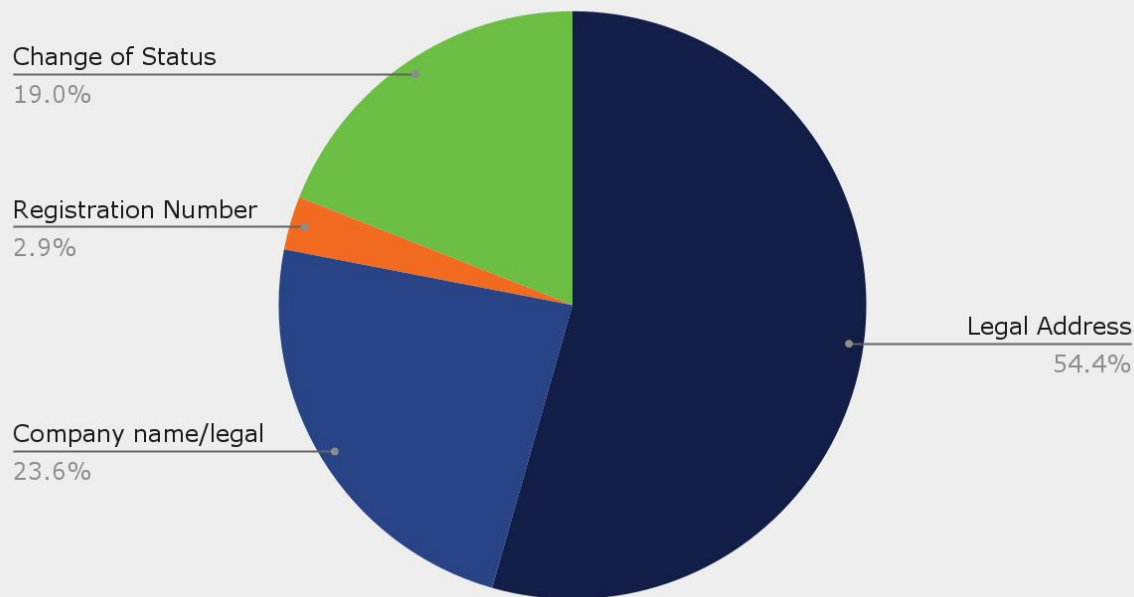
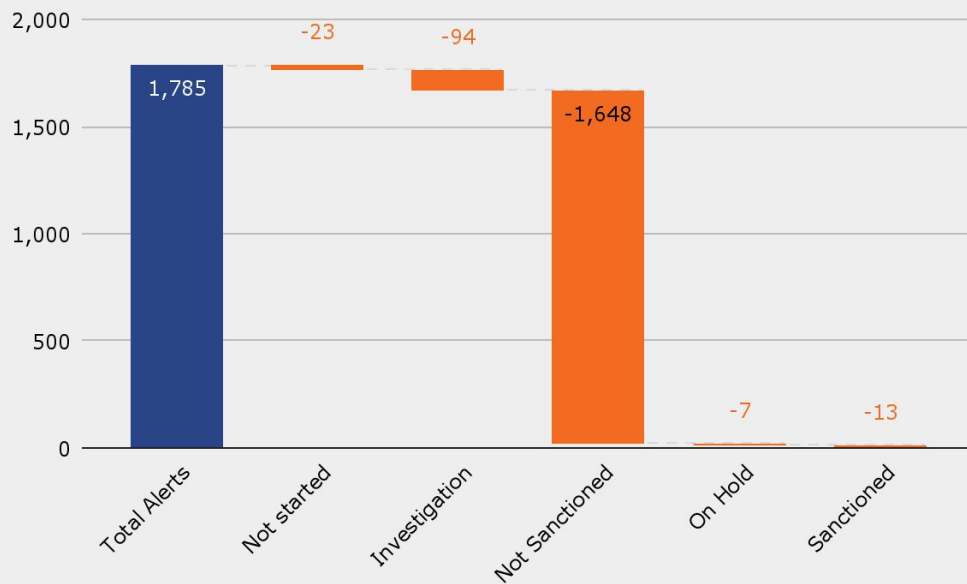- 2,389 Alerts
- **1,430 Updates made**
- 956 Non-essential updates

Change of Status
19.0%

Registration Number
2.9%

Company name/legal
23.6%

Legal Address
54.4%

Status sanctions investigations: on 1 Jan 2025

Type of Resource Holders

Inter RIR Transfer
0.3%

End User
48.7%

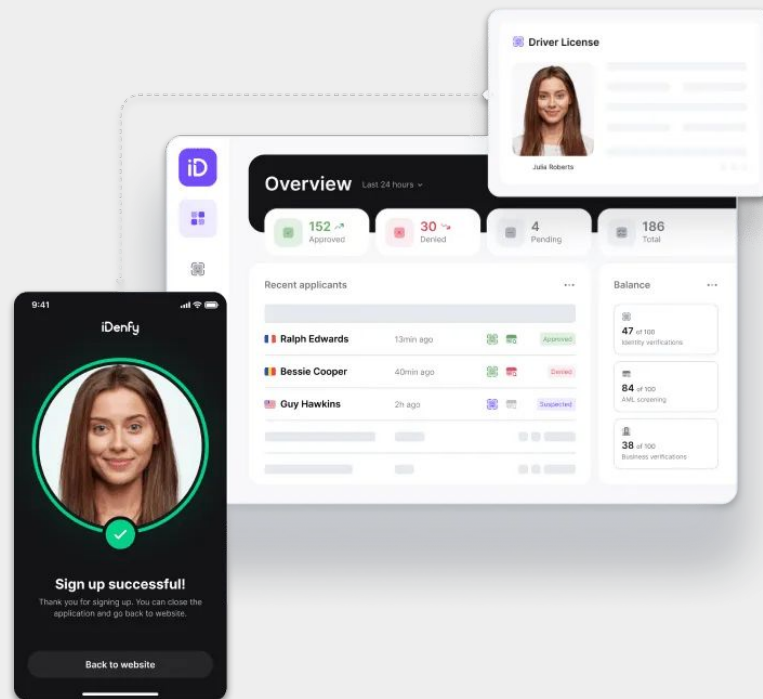870

909

Member
50.9%
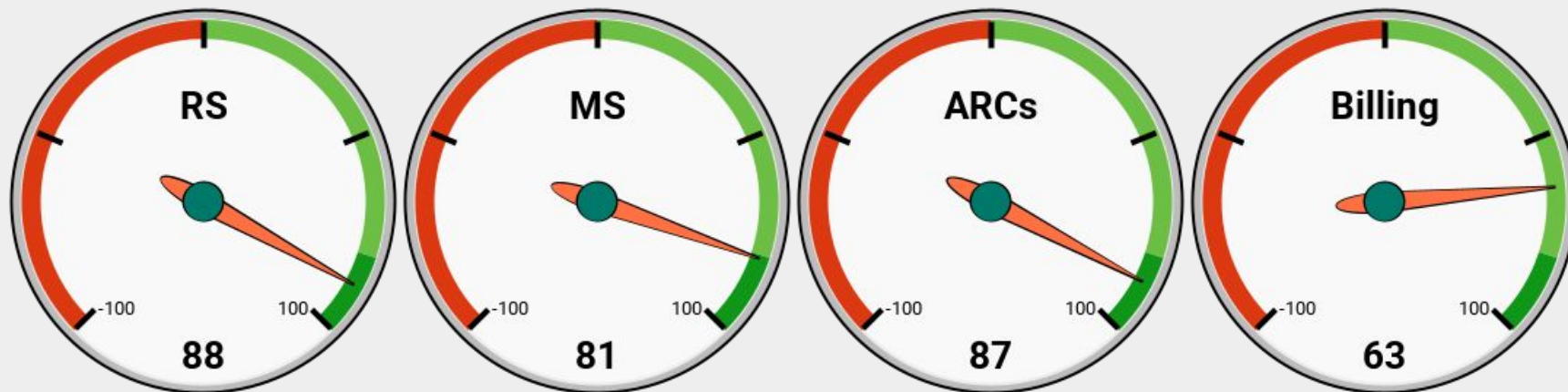
Status of Cases

Identity Verification

ID verification for an accurate registry

- **Identity document + Face recognition**
  - Used to verify who you are

- **Automating Due Diligence Procedures**
  - Members can now use a 'liveness check'
  - Conducted by our third-party provider, iDenfy

- **Notarisation Still Available**
  - Members may still opt to submit notarised documents

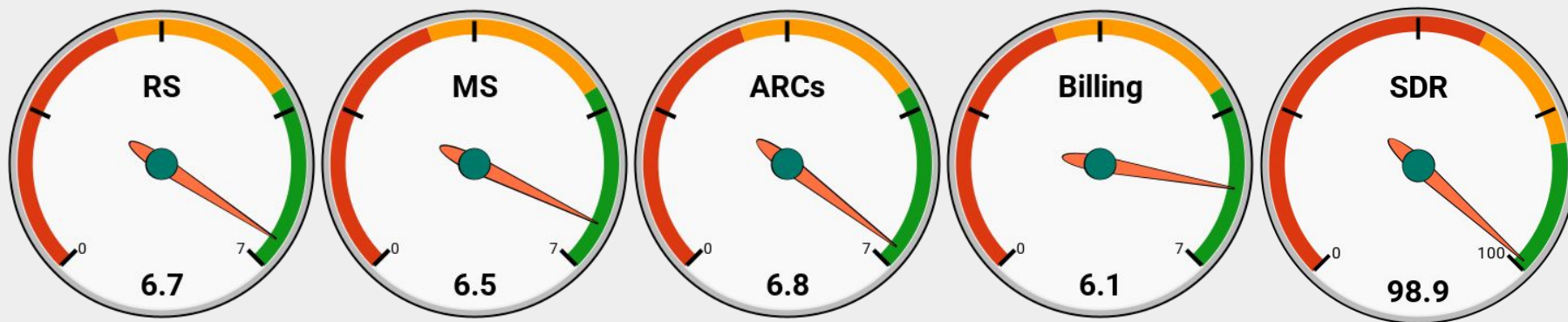# Committed to Outstanding Customer Service

Net Promoter Score (NPS)

RS: 88
MS: 81
ARCs: 87
Billing: 63

RS: Registration Services
MS: Member Services
ARC: Assisted Registry Checks

Committed to Outstanding Customer Service

Customer Effort Score (CES)

RS — 6.7
MS — 6.5
ARCs — 6.8
Billing — 6.1
SDR — 98.9

RS: Registration Services
MS: Member Services
ARC: Assisted Registry Checks
SDR: Same Day Response

Evolving Legislative Landscape

A selection of most impactful legislation

Currently applicable to RIPE NCC services	Incoming and being reviewed if applicable
General Data Protection Regulation (GDPR)	Second Network and Information Security Directive (NIS2)
Protection of privacy in electronic communications (ePrivacy)	Critical Entities Resilience Directive (CER)
Digital Services Act (DSA)	E-evidence Package
Radio Equipment Directive	Data Act
Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)	Updates to RoHS2 and WEEE
Waste from Electrical and Electronic Equipment (WEEE)	Updates to the Regulation on the European Digital Identity Framework (eIDAS)
EU Sanctions Regulations	Cyber Resilience Act (CRA)

Information Security, Risk & Compliance

Commitment to security and integrity

- Acquired ISAE 3000/SOC2 Type I attestation for RPKI.

- Aligning our processes and ways of working with the ISO 27001:2022 security standard
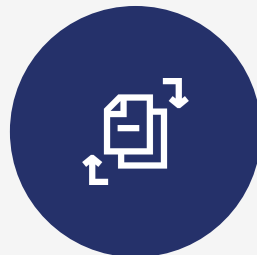
Adherence to regulations

- Authoritative DNS services fall under NIS2

- RIPE NCC services are in the supply chain of our members who fall under NIS2, DORA

- Compliance with ISO 27001 helps ensure readiness for NIS2

Robust risk management

- Risk management in place to understand, prioritise and act on key risks

- Risk appetite tailored to our members' needs and operational sensitivity

SOC 2 Control Framework Controls - for RPKI

Ensures system uptime, failover readiness, disaster recovery, redundancy, backup reliability, and continuous performance monitoring.

Availability (Implemented 9 Controls)

Protects sensitive data through access controls, encryption, secure storage, data classification, policies and procedures.

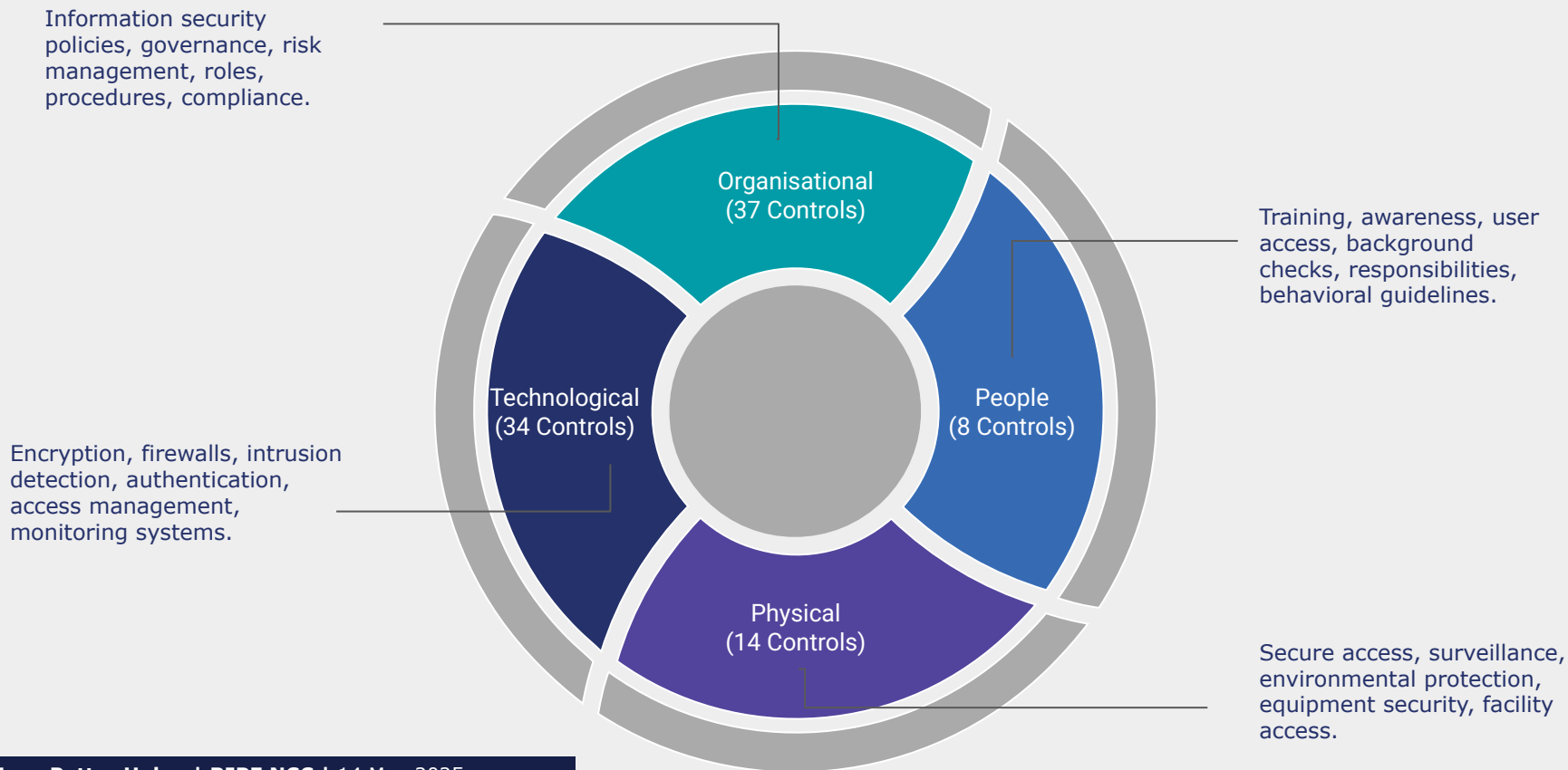Processing Integrity (Implemented 10 Controls)

SOC 2 Control Framework

Confidentiality (Implemented 2 Controls)

Maintains system accuracy, completeness, and reliability through data validation, process monitoring, error detection, and audit trails.

Security (Implemented 55 Controls)

Safeguards systems from threats via access controls, vulnerability management, intrusion detection, threat monitoring, and incident response.

ISO 27001 Annex A Control Themes Under Implementation

Information security policies, governance, risk management, roles, procedures, compliance.

Training, awareness, user access, background checks, responsibilities, behavioral guidelines.

Encryption, firewalls, intrusion detection, authentication, access management, monitoring systems.

Secure access, surveillance, environmental protection, equipment security, facility access.

Organisational
(37 Controls)

People
(8 Controls)

Technological
(34 Controls)

Physical
(14 Controls)

Welcome

Gabor de Wit

Gabor de Wit has just joined as our new Chief Registry Officer

Welcome, Gabor!

Questions & Comments ?