

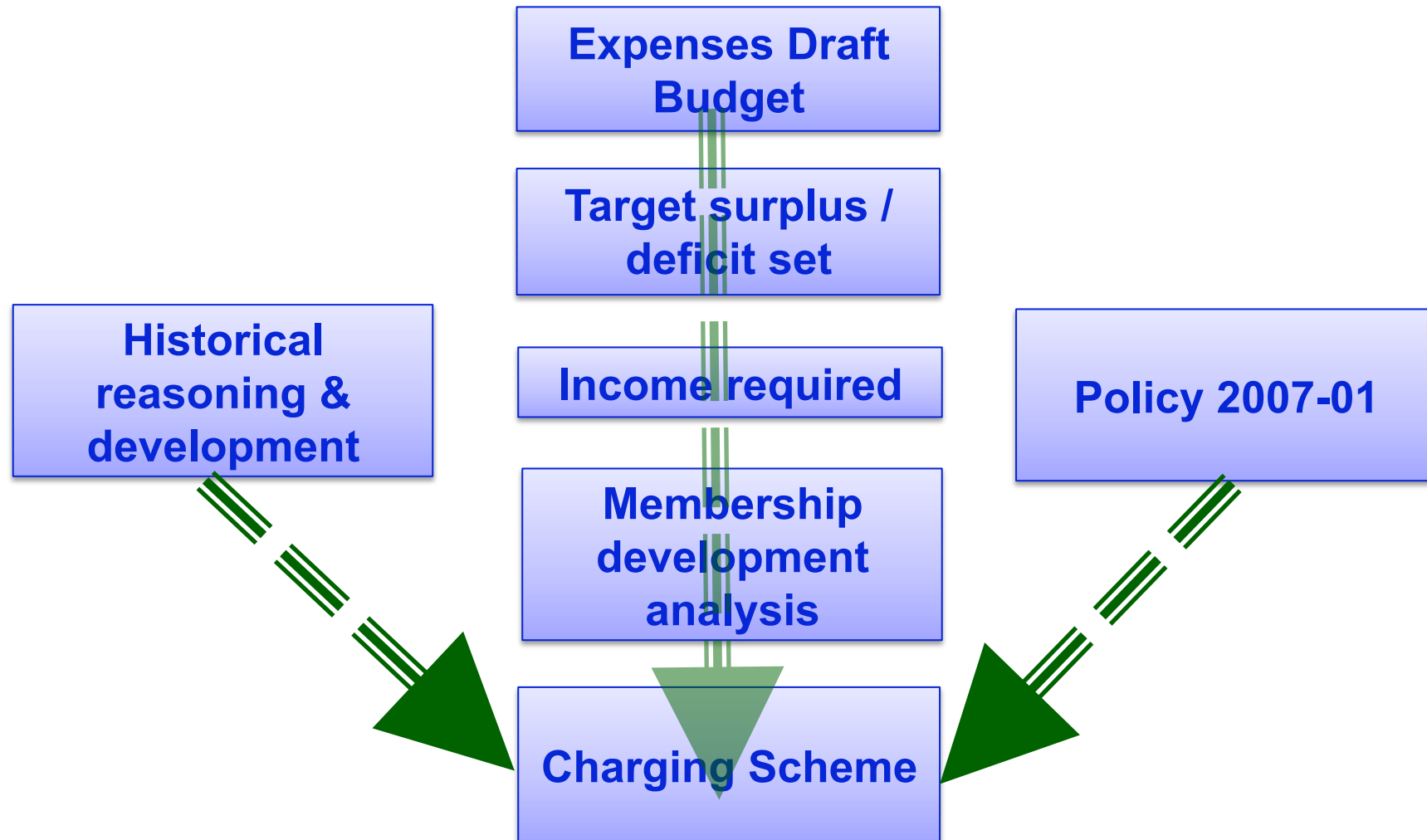


# Draft RIPE NCC Charging Scheme 2010

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# Charging Scheme Procedure 2010





# Table of Contents

- History of the RIPE NCC Charging Scheme
- Background and motivation of Policy 2007-01
- Draft Charging Scheme(s) 2010



# History & Reasoning Charging Scheme

- Initially 1994-1997 – Flat fee (self declared category)
- Change in 1997- Fee based on services rendered from the RIPE NCC – normalised algorithm
- Change in 2004 – Expansion of number of categories from 3 to 5 to better reflect different member size
- Over the past years model changed only to reflect small general improvements and policy changes
  - Initial allocation
  - Direct Assignments



# Initial Charging Scheme model -1997

- One fee for all services
- Self declared category
- 3 Categories Small, Medium and Large
- No reflection of service usage in service fee - no link between resources or services and service fee



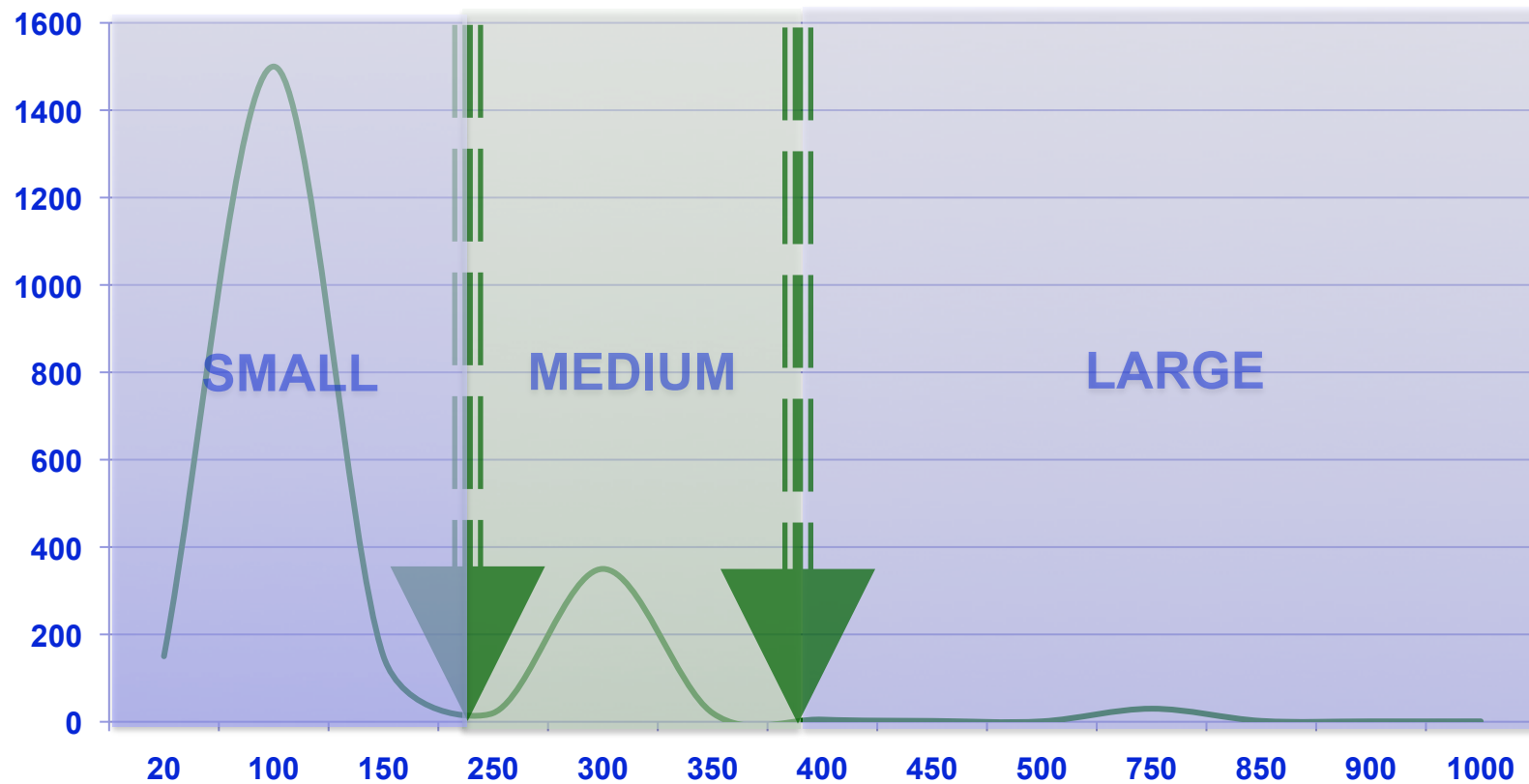
# Charging service model 1997 - 2003

- Requirements for model
  - Fair system
  - Reflect usage of services
- New algorithm based on resource usage over time
- Scores normalised versus Maximum score value
- All registries score between 1-1000
- Boundaries set according to logical boundaries
  - See ripe-255: [RIPE NCC Activities, Expenditure and Charging Scheme ripe-255](#)



# Scoring Algorithm 2003

$$N(R) = \sum_{1993}^Y ki(i - 1992)$$





# Charging Scheme Problems 1997-2003

- Overall Charging Scheme 2003 unclear, complex structure and did not meet the changes in our membership
- Charge linked to address space and not for services rendered
- Black box calculation – impossible to verify your own billing category score
- Only takes IPv4 allocations into account





# Requirements set for Charging Scheme 2004

- Simple and clear structure
- In line with the development and size of registries
- Improve charging for Services rendered - no direct charge for Addresses
- Improve predictability of Income
- Height of fees dependent of Financial developments



# Choices made for Charging Scheme 2004

- Expand the number of billing categories → 3 to 5
- Include IPv6 and ASN requests
- Match the initial allocation request of IPv4, IPv6 and ASN (ASNs were scored over time)
- Keep time factor in algorithm to reflect “maintenance” services of address registration
- Match the boundaries with the existing Charging Scheme and try to determine “natural” boundaries
- Publish boundary score and scores to registries

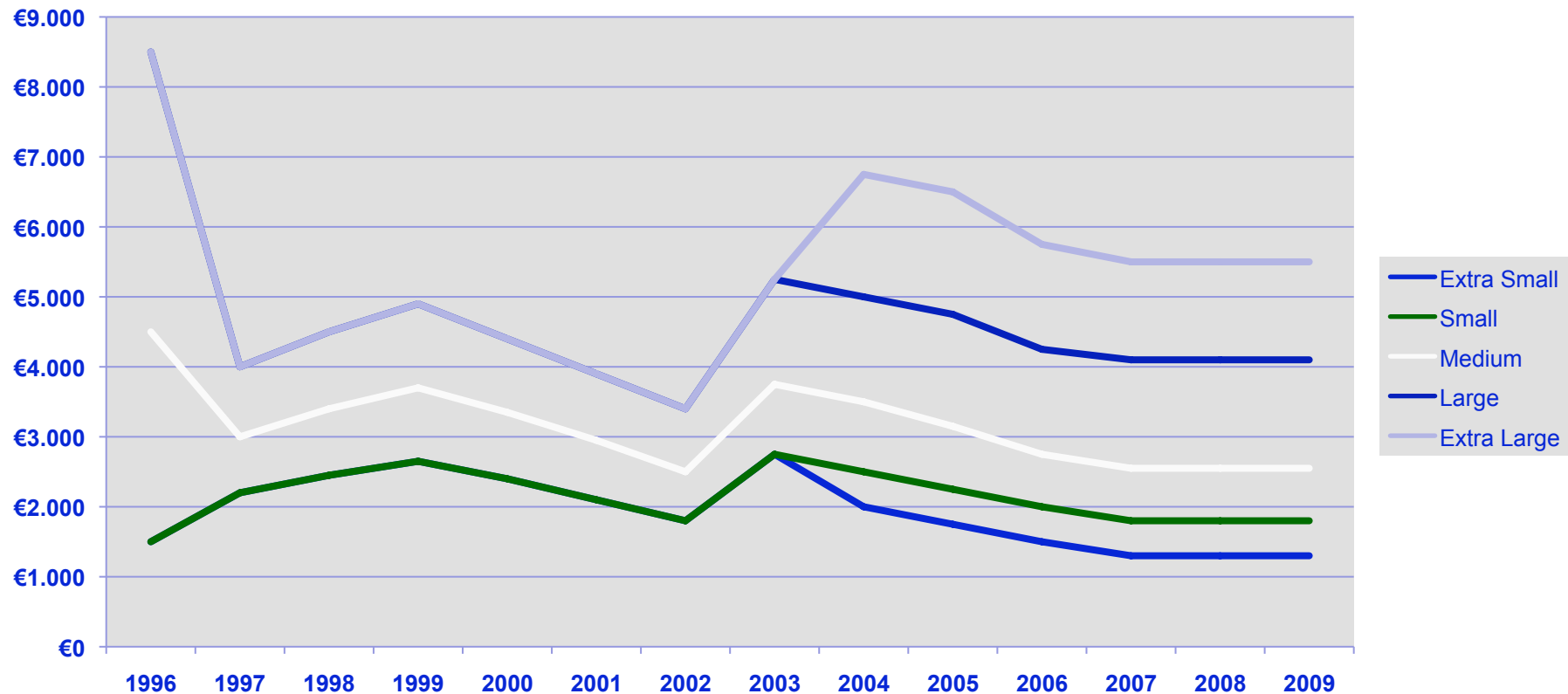


## Changes in Charging Scheme 2005 -

- In 2005 changed to one-time score for Independent Resources
- Included all Independent Resources in algorithm
- Administration Fee (Takeover fee) abandoned
- Alignment with initial allocation criteria
- Small changes in Service Fees – Stable fees
- Rebate of EUR 2.5 million in 2007
- Direct End User Charging Scheme



# Development of Service fees 1996-2009



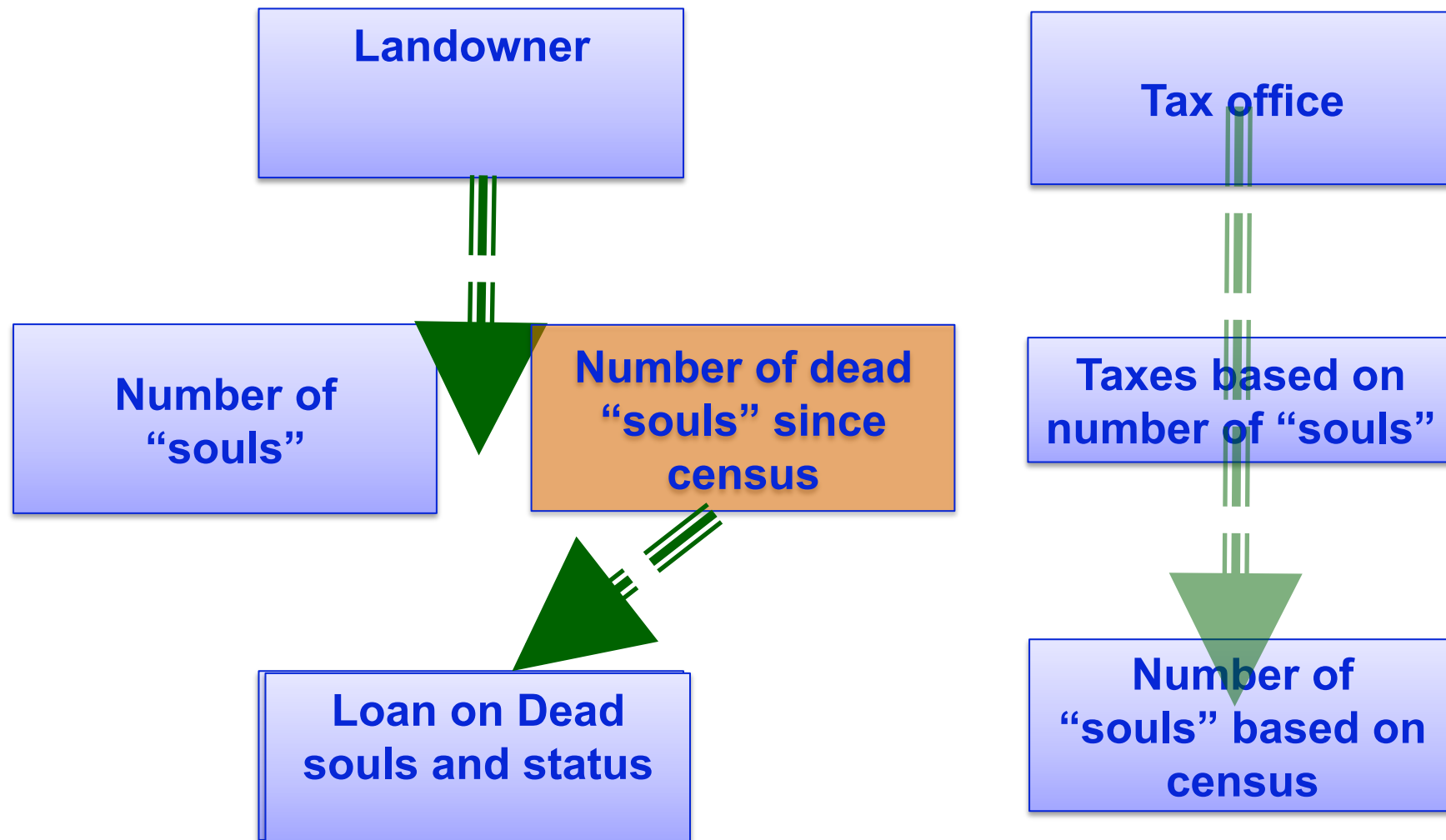


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# Analogy – “N. Gogol – Dead souls”





# Motivation

- Before 2007-01:
  - LIR requests Provider Independent resource for End User by a simple request form
- Result:
  - LIR may or may not have a contract with the End User
  - LIR is not responsible for the block, End User is
  - Possibly End User moves on (leaves LIR)
  - Contact between the resource and the RIPE NCC gets broken
  - Not a responsible way of resource administration



# Motivation

- Problems:
  - Potential environment for resource hijacking to occur
  - Return/reclamation of a resource is almost impossible
  - All other receivers of resources are LIRs and have a contract with the RIPE NCC.
    - Why should End Users be any different?
    - Creating an unfair alternative to receive resources (in a cheaper way)
    - Open to abuse the system
- RIPE NCC service region has high number of PI assignments





## Solution: 2007-01

- Require contracts from End Users in their preference:
  - Via a sponsoring LIR, or
  - Directly with the RIPE NCC
    - New category in the RIPE NCC customer base
- Contract ceases -> Resource back to the RIPE NCC's pool



# Evolution

- Version 1 proposed: April 2007
  - Applies to all space
    - ERX included
  - Single contract possibility:
    - Directly with the RIPE NCC
- Version 4 reached consensus: October 2008
  - ERX excluded
  - Contract with a “Sponsoring LIR” option added



# Summary 2007-01

- Enables RIPE NCC to keep contact with resources
- Introduces mechanism to avoid hijacking
- Enables reclamation of unused resources
- Establishes fairness among resource holders
  - IPs are IPs on any network
  - LIRs vs End Users
- Overall responsible stewardship of resources

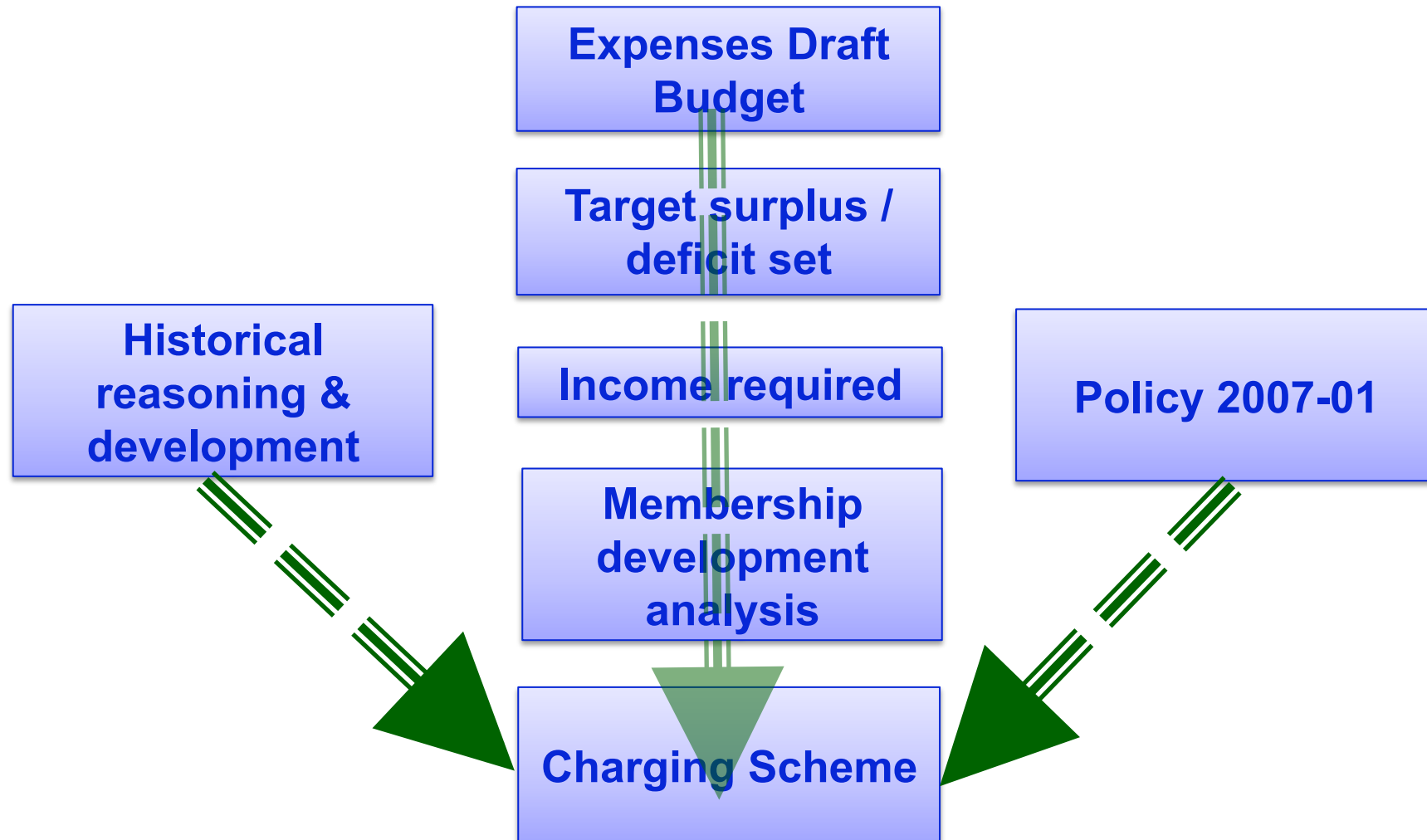


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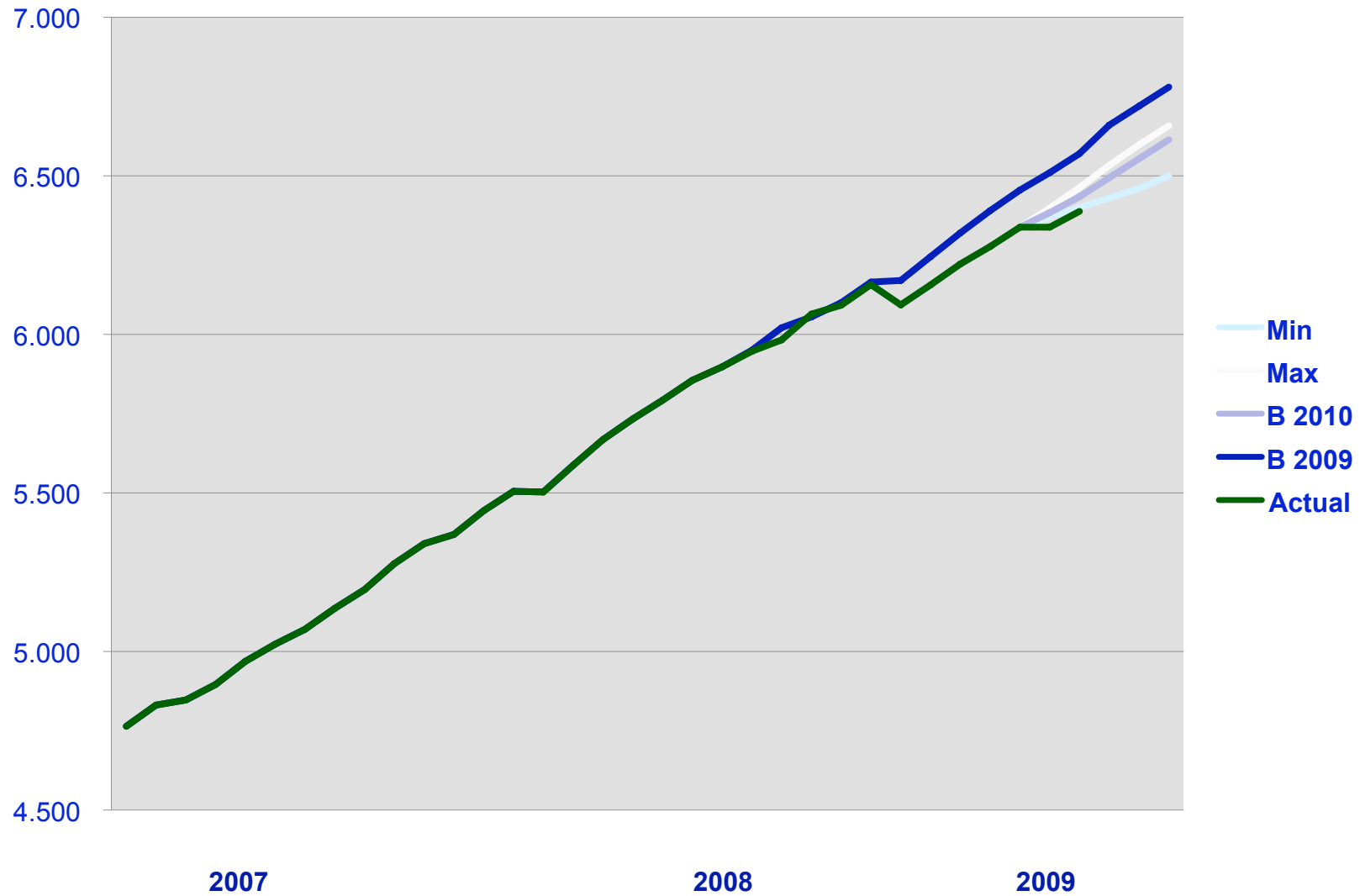


# Charging Scheme Procedure 2010



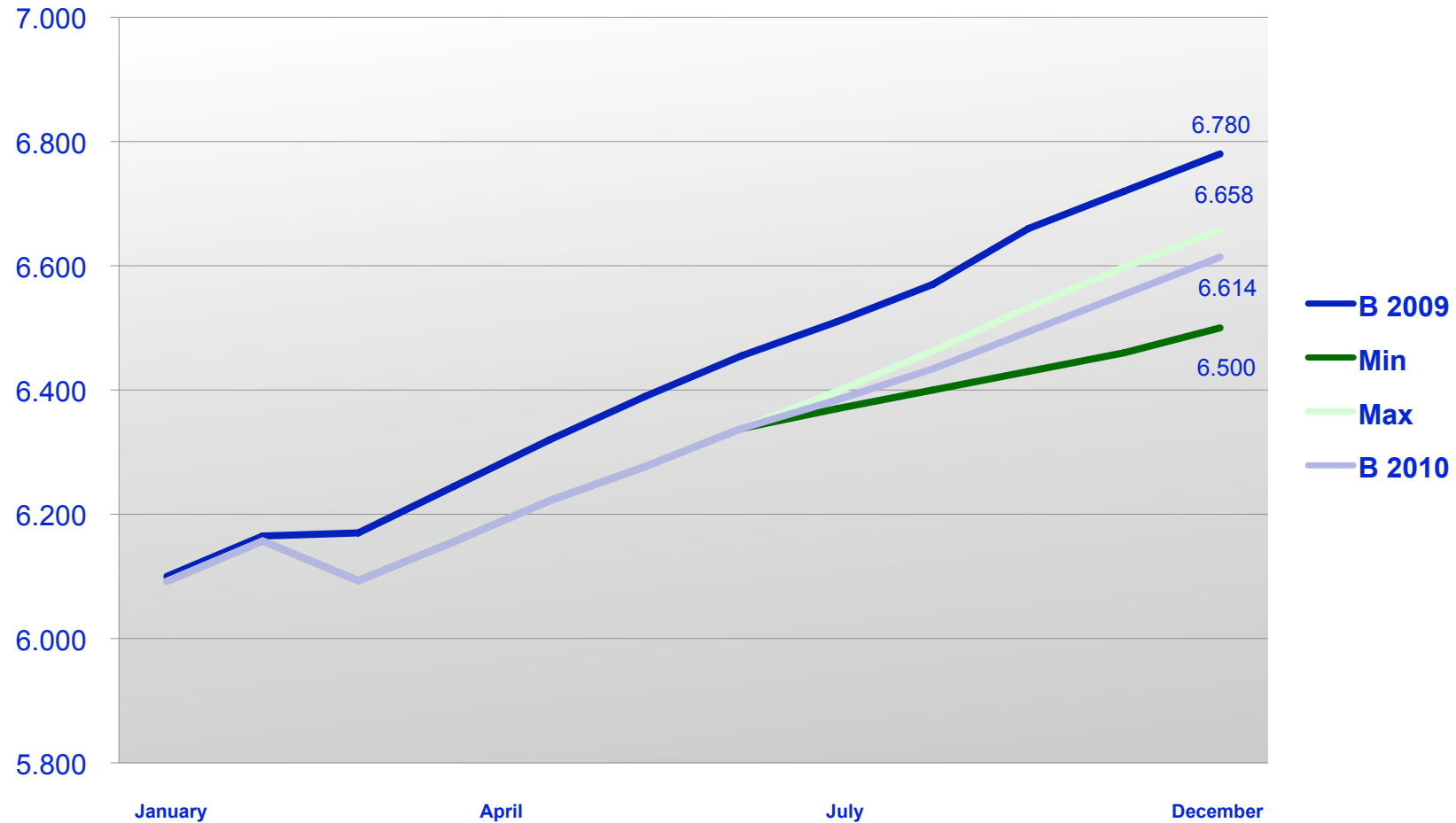


# Membership Growth Prediction





# Membership development 2009





# Estimated Membership 2010

No of Regs	2006	2007	2008	Projection 2009	Est. 2010
Extra Small	1,553	1,977	2,080	1,394	1,516
Small	2,202	2,314	2,743	3,585	3,883
Medium	768	860	991	1,306	1,412
Large	160	175	198	263	282
Extra Large	39	43	52	66	71
<b>Total Membership</b>	<b>4,722</b>	<b>5,369</b>	<b>6,064</b>	<b>6,614</b>	<b>7,164</b>
<b>Net growth %</b>	<b>12%</b>	<b>14%</b>	<b>13%</b>	<b>9%</b>	<b>8%</b>





# Draft Charging Scheme 2010 Process

- In 2008 Policy 2007-01 adopted
- No changes to the Charging Scheme structure to avoid surprises/too little time

- 
- Discuss different Charging Scheme options
  - Propose Charging Scheme to members mailing list
  - Discussion
  - Final draft Charging Scheme for voting in GM



# Draft Charging Scheme 2010

- Separate fee for Direct Assignments
- Five categories XS/S/M/L/XL
- A score determines what category a member has
- Score based on PA IPv4 & PA IPv6 over time
- Direct Assignments have a recurring charge per assignment
- 50 EUR per Direct Assignment



# Alternative Draft Charging Scheme 2010 B

- One fee for all RIPE NCC Services
- Five categories XS/S/M/L/XL
- A score determines what category a member has
- Score based on Internet Number Resources over time
- All Internet Number Resources are scored
- Average Service Fee increase of 8%



# GM Resolution and option

The RIPE NCC Executive Board acknowledges that there are different opinions on the implications of charging for Independent Internet Number Resources. Therefore in the event that the first proposed Charging Scheme (Version A) is not adopted, the RIPE NCC Executive Board provides for an alternative Charging Scheme (Version B) based on the current Charging Scheme 2009. This Charging Scheme (Version B) increases the Service fees such that the total revenue equates the total revenue of the proposed Charging Scheme (Version A).

<http://www.ripe.net/membership/gm/gm-october2009/agenda.html>

- Vote on Charging Scheme A
- If No → Vote on Charging Scheme B
- If No → Current Charging Scheme 2009



# Category difference 2005-2009

Percentage category change per year



- Small differences over past 4 years



# Direct End User Charging Scheme

- Separate contract signed with End Users
- Administration fee - sign up fee
- Maintenance fee same as for members
  - First year Extra Small
  - Following years based scoring algorithm (same as for members)



# Conclusion

- Incorporated 2007-01 in the Draft Charging Scheme
- After discussions alternative proposed
- Make the 2 proposals equal for revenue
- Inform the membership about the protocol
- So.....all come and vote!!!!



# Questions?

